

**UNIVERSITY
OF
SOUTHERN QUEENSLAND**

**A COMPOSITIONAL STUDY OF
THE
LUNAR GLOBAL MEGAREGOLITH
USING
CLEMENTINE ORBITER DATA**

A dissertation submitted by
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Abstract

This thesis presents new information about the global megaregolith of the Moon, using 2059 craters (5 to 50 km diameter) as natural probes. Iron (FeO) and titanium (TiO₂) concentrations were obtained from crater ejecta blanket data over an area between 60° North to 60° South latitude derived from the 1994 Clementine mission.

The average iron and titanium weight percentages for lunar crater ejecta were calculated using the US Geological Survey's ISIS software, and used to determine the variation with depth of iron (FeO) and titanium (TiO₂) in the highlands, mare areas and the South Pole Aitken basin. In addition, megaregolith compositional Iron (FeO) and Titanium (TiO₂) Maps and compositional Province Maps were generated, and studied in detail.

The Lunar Megaregolith Iron Province Map divides the Highland areas into 2 distinct provinces of low-iron Highland I (0-3.7 FeO weight percentage) and low-medium level iron Highland II (3.8-6.4%), and the Mare and South Pole Aitken Basin each into 3 distinct provinces (6.5-9.7%, 9.8-13.6%, and 13.7-18.3%). Similarly, a Titanium Megaregolith Province Map divides the Moon globally into 5 provinces based on weight percentages of TiO₂.

A new finding is the Highland II Province of elevated iron concentration which surrounds basins. These elevated iron levels may be explained in terms of an "Intrusion Model". In this model, basin formation fractures the surrounding anorthositic bedrock, and the middle level anorthositic crust allows mafic (basaltic?) magma to intrude. This intrusion into the megaregolith is in the form of sills and dykes from deep mafic sources but generally does not intrude into the surface regolith. In some places however, the mafic (basaltic?) lava may have extruded onto the surface, such as near Crater 846 (15.6N 92.2W). The megaregolith, which consists of large volume breccia, would have voids and vacancies in this structure into which mafic or basaltic material could intrude. "Islands" of Highland I Province material surrounded by Highland II Province indicate this intrusion was non-uniform.

Another possible explanation for the Highland II Province iron levels comes from the "Thrust Block" model, where deep mafic material has been broken into large blocks by the basin-forming events, and "thrust" or uplifted to displace most of the overlying anorthosite bedrock, thereby mechanically mixing with the megaregolith to provide the additional iron input. However, this does not entirely fit comfortably with the data in this study.

A third explanation for the Highland II Province arises from the "Basin Impact Ejecta Model" such as the Imbrium Impact described by Haskin (1998). The Basin Impact Ejecta model describes the effect of basin impacts around 4.0 billion to 3.8 billion years ago in the Moon's history (Ryder, 1990; Taylor, 2001). This model implies that basin material was ejected and deposited on a global or similar scale. However, the results of this study place severe limitations on the feasibility of the "Basin Impact Ejecta" model to explain any significant mafic input from such ejecta in forming the Highland II megaregolith material.

These Province Maps provide a new dimension to the study of the Moon's crustal development and reveal a highly complex history, providing a basis for future study.

Certification of Dissertation

I certify that this dissertation contains no material accepted for the award of any other degree or diploma in any university. To the best of my knowledge, it contains no material published or written by any other person except where due reference is made in the text.

Signature of Candidate

Date

ENDORSEMENT

Signature of Supervisor

Date

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Contents

Abstract	i
Certification of Dissertation	ii
Acknowledgements	iii
Contents	iv
List of Figures	vi
List of Tables	ix
1 INTRODUCTION	1
1.1 Overview of Past Work	1
1.2 The Lunar Megaregolith	1
1.3 Statement of relevance/ importance of this research:	2
1.3.1 What is the problem?	2
1.3.2 Why is it important?	2
1.3.3 What was done to address this problem?	2
1.4 Overview of Lunar Research	2
1.4.1 Formation of the Lunar Magma Ocean	2
1.5 Crustal Formation and Structure	4
1.6 Craters and their Formation	5
1.7 Lunar Time Scale and Basin Formation	6
1.7.1 Mare Formation, Basalt, K.R.E.E.P. Basalt, and Sources	7
1.8 Definitions and background	9
1.9 Goals of the Study	11
2 METHODOLOGY	12
2.1 Analysis of Clementine data	12
2.1.1 Megaregolith Composition Characterisation	12
2.2 Crater diameter-depth relationship	13
3 RESULTS	14
3.1 Results of Crater Ejecta Measurements	14
3.2 Graphical and Statistical Analysis of Results	17
3.2.1 Global Iron	18
3.2.2 Highland Iron	21
3.2.3 Mare Iron	24
3.2.4 South Pole Aitken Basin Iron	27
3.2.5 Global Titanium	30
3.2.6 Highland Titanium	33
3.2.7 Mare Titanium	35
3.2.8 South Pole Aitken Basin Titanium	38
3.3 New Lunar Megaregolith Province Maps	40
3.3.1 The Lunar Iron Province Map	41
3.3.2 The Lunar Titanium Province Map	43
4 DISCUSSION	45
4.1 Interpretation of the mapping results	45
4.2 Comparison of the new Iron and Titanium megaregolith Province Maps with the bedrock map of Tompkins and Pieters (1999)	45
4.3 Comparison of the megaregolith map with ejecta from Mare Orientale, Mare Imbrium, and Mare Nectaris that show deep crust (Spudis, 1993)	47
4.4 Relationships between the "units" of a) Megaregolith, b) Bedrock, and c) Deep Crust	49

4.5	Review of models of the Lunar Origin and Crust.....	53
4.5.1	Magma Ocean Models	53
4.5.2	Lunar Cataclysm Controversy and Competing Models.....	54
4.5.3	Comparison of results with previous models and ideas	54
4.6	The relationship of the megaregolith, compositionally to the Lunar Crust, Upper Crust, Middle Crust, and Lower Crust	57
4.6.1	Compositional comparison between the megaregolith and the “bedrock”: more or less mafic than "bedrock"?.....	60
4.6.2	Compositional Relationship between the Megaregolith and the Regolith	61
4.7	Variation of the Megaregolith thickness	62
4.8	Scales of lateral and vertical heterogeneity for Iron and Titanium.....	62
4.9	The relationship of the megaregolith to "basin ejecta"	63
4.10	Origin of the Highland II Province	64
5	CONCLUSIONS.....	67
5.1	Principal findings	67
5.1.1	Properties of the Megaregolith.....	67
5.1.2	Distribution	68
5.1.3	Thickness	68
5.2	Origin of the Megaregolith Provinces.....	68
5.3	Lunar Evolution	69
5.4	Comparison between the new Lunar Province Maps and previous maps based on other criteria	70
5.5	What the new maps tell us about the Moon, its processes and history	71
5.6	Future Work	72
5.6.1	Work remaining to be done.....	72
5.7	Methodology for future work.....	72
5.8	Possible Applications	72
	References	74
	Bibliography.....	81
Appendix A	Formation of the Moon	82
Appendix B	Image Maps of the Moon	83
Appendix C	CD-Rom containing thesis material	84

List of Figures

- Figure 1-1 A computer simulation by Kipp and Melosh (1986) demonstrates the feasibility of the Collision theory of formation of the Earth-Moon System by the collision of a Mars size object with a proto-Earth (Hartmann and Davis, 1975; Cameron and Ward, 1976). The Figure above shows the progress of the events proposed by this model in four time frames over a period of 12.5 minutes. The smaller mass that “rebounded” into Space eventually formed the Moon, while the larger mass formed the Earth. The shaded areas represent the metallic cores and the lighter areas depict the mantle and crust. This concept is consistent with the currently accepted model of planetary accretion and formation (Taylor 2001) –see Appendix A. 3
- Figure 1-2 Proposed Models of the Magma Oceans that formed following the coalescence of the Moon from the debris after its formation. As the material for the Moon coalesced, the heat from formation and of to a lesser extent, radiogenic elements; caused the Moon to be in a partially or mostly molten state and allowed material to differentiate the anorthositic and mafic materials. The model on the left indicates a partial melt that does not allow a core to form, whereas the model on the right illustrates a total melt that allows a small core to form according to Taylor, 2001. 4
- Figure 1-3 A cross section of the Moon through the equatorial plane, showing the Moon's centre of mass displaced toward the Earth's position given by the arrow. It illustrates the thinner crust on the near side and thicker crust on the far side (Taylor, 1982, 1999). CM is the centre of mass, and CF is the centre of the figure to illustrate the mass displacement (Taylor, 1982, 1999). 5
- Figure 1-4 Schematic cross section through a growing impact crater. Pressures are given in giga Pascals. Figure adapted from Stoffler (1981). 5
- Figure 1-5 Chronostratigraphic columns for lunar history with relative stratigraphy (after Hartmann et al., 2000; based on Wilhelms, 1984, 1987). 6
- Figure 1-6 The two interpretations of lunar bombardment history. The upper line, proposed by Hartmann represents a continuously declining flux with some minor superimposed spikes. The lower line proposed by Ryder assumes that the Moon was fully accreted 4.4 billion years ago and little has been added since. In the latter interpretation, there was a sudden spike or cataclysm of impact events around 4.0 – 3.85 billion years ago. Figure adapted from Ryder (1990). 7
- Figure 1-7 This figure depicts a reconstruction of the face of the Moon about 3.9 billion years ago. This is after the impact that formed the Imbrium basin. The Highland surface is shown prior to mare basalt flooding (Wilhelms and Davis, 1971). Colours in this figure are an artefact of the image reproduction process and have no meaning. 7
- Figure 1-8 A reconstruction of the Moon at 3.2 billion years ago at the end of the period of mare basalt flooding. This was prior the formation of craters such as Archimedes, Plato, and Sinus Iridium. (Wilhelms and Davis, 1971). Colours in this figure are an artefact of the image reproduction process and have no meaning. For a global topographic view of the Moon today see Appendix B. 9
- Figure 1-9 Crustal structure of the Moon. The uppermost level consists of the regolith layer of up to a few metres in thickness. Below that is a megaregolith of up to several kilometres in thickness, in Highland regions, overlying the bedrock. 10
- Figure 1-10 Schematic cross-section (after Heiken et al., 1991, p.93) illustrates the effects of large scale cratering on structures of the upper crust such as the formation of megaregolith. This is inferred from seismic experiments (Toksoz et al., 1973). The depth in the schematic figure is highly uncertain because the total volume of large basins and craters remains unknown. 11
- Figure 3-1 Lunar Megaregolith Iron Distribution Map (updated version of Spudis et al., 2004 with the inclusion of some revised values), resulting from analysis of average iron weight percentage of crater ejecta of craters 60° N to 60° S. The craters investigated were between about 5 and 50 km in diameter. Blank areas between data points indicate uncratered areas or no data due to lack of useable craters. GIS Software divided the range of iron values into 5 classes or groupings. The scale is 1degree = ~32 km, (Lunar and Planetary Institute, www.lpi.user.edu/clemen/ website 2004.) 15
- Figure 3-2 Lunar Megaregolith Titanium Distribution Map, resulting from analysis of average titanium percentage of crater ejecta of craters 60° N to 60° S. The craters investigated are

<i>between 5 and 50 km in diameter. Blank areas between data points indicate no data due to lack of useable craters or lack of craters. As in the Figure 3-1, the GIS software divided the titanium values into 5 classes or groupings. The scale is 1degree = ~32 km, (Lunar and Planetary Institute, www.lpi.user.edu/clemen/ website 2004.)</i>	17
Figure 3-3 Graph of Global Average Iron Weight Percentage vs. Crater Diameter.	19
Figure 3-4 Plot of Global Iron using one standard deviation (bars) relating to crater mean diameter at 5 kilometre intervals.	20
Figure 3-5 Plot of Global Iron using one standard deviation (bars) relating to crater mean diameter at 10 kilometre intervals.	21
Figure 3-6 Graph of Highland Average Iron Weight Percentage vs. Crater Diameter.	22
Figure 3-7 Plot of Highland Iron using one standard deviation (bars) relating to crater mean diameter at 5 kilometre intervals. The 45 km to 50 km bin relies on one crater; therefore, no standard deviation can be calculated.	23
Figure 3-8 Plot of Highland Iron using one standard deviation (bars) relating to crater mean diameter at 10 kilometre intervals.	24
Figure 3-9 Graph of Mare Average Iron Weight Percentage vs. Crater Diameter. This plot reveals the generally higher iron values expected for basaltic regions.	25
Figure 3-10 Plot of Mare Iron using one standard deviation (bars) relating to crater mean diameter at 5 kilometre intervals.	26
Figure 3-11 Plot of Mare Iron using one standard deviation (bars) relating to crater mean diameter at 10 kilometre intervals.	27
Figure 3-12 Graph of South Pole Aitken Average Iron Weight Percentage vs. Crater Diameter.	28
Figure 3-13 Plot of South Pole Aitken Basin Iron (with one standard deviation error bars) with 5 km increments in crater mean diameter.	28
Figure 3-14 Plot of South Pole Aitken Basin Iron (with one standard deviation error bars) relating to crater mean diameter at 10 kilometre intervals.	29
Figure 3-15 Graph of Global Average Titanium Weight Percentage vs. Crater Diameter.	31
Figure 3-16 Plot of Global Titanium (with one standard deviation error bars) relating to increasing crater mean diameter of 5 kilometre increments.	31
Figure 3-17 Plot of Global Titanium (with one standard deviation error bars) relating to crater mean diameter at 10 kilometre increasing increments.	32
Figure 3-18 Graph of Highland Average Titanium Weight Percentage vs. Crater Diameter.	33
Figure 3-19 Plot of Highland Titanium (with one standard deviation error bars) relating to crater mean diameter at 5 kilometre intervals. The data point on the extreme right hand side is based on a single crater and hence no error bar can be given.	34
Figure 3-20 Plot of Highland Titanium (with one standard deviation error bars) relating to crater mean diameter at 10 kilometre intervals.	35
Figure 3-21 Graph of Mare Average Titanium Weight Percentage vs. Crater Diameter.	36
Figure 3-22 Plot of Mare Titanium using (with one standard deviation error bars) relating to increasing crater mean diameter of 5 kilometre increments. The 45 to 50 km point relies on a single crater for which no error bar can be given.	36
Figure 3-23 Plot of Mare Titanium (with one standard deviation error bars) for crater mean diameter increasing by 10 kilometre increments.	37
Figure 3-24 Graph of South Pole Aitken Basin Average Titanium Weight Percentage vs. Crater Diameter.	38
Figure 3-25 Plot of South Pole Aitken Basin Titanium (with one standard deviation error bars) ejecta for increasing crater mean diameter in 5 kilometre increments.	39
Figure 3-26 Plot of South Pole Aitken Basin Titanium (with one standard deviation error bars) relating to crater mean diameter, in increments of 10 kilometres.	40
Figure 3-27 Moon (Megaregolith /Subsurface) Iron Province Map (approximate scale 1:86,000,000), derived by interpolation of the Iron Weight Distribution Map (Figure 3-1). The interpolation takes values of surrounding pixels and derived a value for areas of no data using kriging (Davis 1986) and calculates a value in this case to a spherical surface. Kriging for maps for areas between data points is an often used statistical estimation technique for geological mapping (Davis 1986). The resultant province map can be compared with the Iron Distribution Map data in Figure 3-1. (This Iron Megaregolith Map is the most recent version of that published in the preliminary report by Spudis et al., 2004, in that some revised values have been used in this newer version).	42
Figure 3-28 Moon Surface Iron Distribution Map adapted from Spudis et al. (2004). This map represents the iron distribution on the surface. The pink flush over anorthosite Highland	

regions is because of the iron in ejecta from cratering events. Although the weight percentages on this surface map are not exactly the same as the megaregolith map, the values are sufficiently close to provide a clear indication of the differences and similarities of the surface and subsurface in terms of iron distribution.	43
Figure 3-29 The Lunar Megaregolith/ Subsurface Titanium Province Map was derived by the interpolation of the Titanium Weight Percentage Distribution Map (Figure 3-2). The interpolation takes the values of surrounding pixels and derives a value for areas of no data using kriging (Davis, 1986).	44
Figure 4-1 Lunar Bedrock Map by Tompkins and Pieters (1999) derived by means of an analysis of central peaks (see Figure 1-9) of 109 craters, using Clementine spectral data and testing of lab samples. Depending on latitude, the pixel size was 100 metres to 200 metres using Clementine UVVIS data (an approximate map scale bar has been added).	49
Figure 4-2 Norite model proposed by Ryder and Wood (1977). The data used for this model was sampled by Apollo 15 and 17 Astronauts from Mare Serenitatis and Mare Imbrium regions. ...	55
Figure 4-3 The Intrusion model where basalts intrude the fractured anorthosite bedrock to then intrude the anorthosite megaregolith to form Highland II megaregolith. To support this model it is interesting to note one clear example from Table 3-1 of Crater 846 (15.6 N, 92.2 W). The crater's position is west of Northern Oceanus Procellarum and within the Highland Terrane. This crater is in a small area that is higher in iron and slightly higher in titanium, possibly from basalt being extruded onto and over the surface.	55
Figure 4-4 This variation of Intrusion model illustrates how sills and dykes may have intruded the anorthosite megaregolith to provide the medium iron readings obtained from analysis of ejecta of craters in the region surrounding the maria and basins referred to as Highland II (3.0 to 6.0% iron). However this variation seems less supportable as evidence reveals that Mare basalts are the result of several flows and not a single event (e.g. Burroughs and Spudis, 2001).	56
Figure 4-5 The "Thrust Block" Model on a regional scale as depicted above relies on the lower mafic material being thrust and uplifted, when impactors excavate a nearby basin. The blocks of mafic material mix with the anorthosite megaregolith to provide the medium iron megaregolith readings, referred to as Highland II (3.0 to 6.0% iron). The Highland I megaregolith iron content is much lower (0.0 to 3.0 %).	56
Figure 4-6 A Localised version of the Thrust Block Model depicting lower iron Highland I and low-medium iron Highland II.	57
Figure 4-7 A diagram depicting the deposit of thorium from Imbrium ejecta based on Apollo gamma ray spectral data acquired from orbit and correlated with Apollo samples (after Haskin, 1998). This may indicate the extent of all ejecta from the Imbrium event.	59
Figure 4-8 A general diagram that broadly illustrates the qualitative differences in megaregolith thicknesses among highland, thin mare, and thick mare. The formation of some very deep mare may have excavated all the megaregolith.	60
Figure B 1 Map A. An Albedo image of the Moon using the 750nm mosaic from the Clementine of 1994 (Lunar and Planetary Institute Houston, Texas, USA. www.lpi.usra/clemen/albedo.gif). The numbers represent the following features on the Moon's surface.	83
Figure B 2 Topographic map derived from Clementine data (Lunar and Planetary Institute Houston Texas USA Website (www.lpi.usra/clemen/nftopo.gif)). The numbers represent the following features on the Moon's surface.	84

List of Tables

Table 3-1 <i>Crater Ejecta containing Anomalous Iron (FeO) and Titanium (TiO₂) Values.</i>	16
Table 3-2 <i>Average Global Iron compared with mean crater diameter (5 km intervals).</i>	20
Table 3-3 <i>Average Global Iron compared with mean crater diameter (10 km intervals).</i>	21
Table 3-4 <i>Average Highland Iron compared with mean crater diameter (5 km intervals).</i>	23
Table 3-5 <i>Average Highland Iron compared with mean crater diameter (10 km intervals).</i>	24
Table 3-6 <i>Average Mare Iron compared with mean Crater Diameter(5 km intervals).</i>	26
Table 3-7 <i>Average Mare Iron compared with mean crater diameter (10 km intervals).</i>	27
Table 3-8 <i>Average South Pole Aitken Basin Iron compared with mean crater diameter (5 km intervals).</i>	29
Table 3-9 <i>Average South Pole Aitken Basin Iron compared with mean crater diameter (10 km intervals).</i>	30
Table 3-10 <i>Average Global Titanium compared with mean crater diameter (5 km intervals).</i>	32
Table 3-11 <i>Average Global Titanium compared with mean crater diameter (10 km intervals).</i>	32
Table 3-12 <i>Average Highland Titanium compared with Mean Crater Diameter (5 km intervals).</i>	34
Table 3-13 <i>Average Highland Titanium compared with mean crater diameter (10 km interval).</i>	35
Table 3-14 <i>Mare Titanium compared with mean crater diameter (5 km intervals).</i>	37
Table 3-15 <i>Average Mare Titanium compared with mean crater diameter (10 km intervals).</i>	37
Table 3-16 <i>South Pole Aitken Basin Titanium for different mean crater diameter (5 km intervals).</i> .	39
Table 3-17 <i>Average South Pole Aitken Basin Titanium compared with mean crater diameter (10 km interval).</i>	40
Table 4-1 <i>Examples from study data set of Iron data variance in individual craters in Highland areas.</i>	51

1 INTRODUCTION

1.1 Overview of Past Work

Previous work conducted by numerous workers such as Lucey, Spudis, Pieters, Bussey, Gillis, Taylor and numerous others have focused on the surface or regolith of the Moon using mapping (Lunar Orbiters) and spectroscopic analysis by telescope (Pieters, 1986), or from spacecraft (Apollo Orbiter, Clementine, and Lunar Prospector mission) or sample return missions such as American Apollo mission and Russian Luna missions. In the Tompkins and Pieters paper of 1999, an analysis of the lunar bedrock was attempted by a spectral study of central peaks. These central peaks of craters over 50 km diameter were interpreted as representative of bedrock (Tompkins and Pieters, 1999.)

Ryder and Wood (1975) devised a “Norite” model, based on Apollo 15 and 17 and Luna 24 (Mare Serenitatis and Mare Imbrium) data, for the crust of the Moon. It is important to note that Ryder and Wood did not use Highland samples in constructing their model; however, comparisons with the Norite models prediction for the Mare regions to compare with the results of the new data of this thesis may prove interesting.

Although mentioned in a number of papers (e.g. Hartmann, 1973, 1980; and Hartmann et al. 1986), no global analysis of the material between the regolith and bedrock had been attempted until this thesis. The crustal section to be studied in this thesis is called the “Megaregolith” (Hartmann, 1973) and subsurface in the maria and South Pole Aitken Basin. This study does not replace the work of Tompkins and Pieters or other workers but complements these other works, allowing a fuller and more detailed view of the lunar crust.

1.2 The Lunar Megaregolith

The lunar “megaregolith” is a major portion of the upper lunar crust. Hartmann (1973) first used this term (“mega-regolith”), and later defined it (Hartmann, 1986) as a “product of the cataclysm at least a few kilometres deep....”. He described the megaregolith as being derived from repeated impacts that penetrated and pulverised the thin surface layer of solid material (see also Hartmann, 1999).

The megaregolith lies sandwiched between the surface regolith and bedrock. The surface material has been analysed through data collected from telescopic sources, samples returned from the Apollo missions and spectral data from various robotic Space missions such as Clementine (1994) and Lunar Prospector (1997). The mineralogy of lunar crater central peaks was analysed by Tompkins and Pieters (1999) using Clementine data as this was seen to reflect the nature of the underlying bedrock.

The megaregolith contains keys to understanding the Moon’s crustal history and development. Since the term “megaregolith” is technically restricted to the anorthositic Highlands, it is not really suitable for material underlaying the regolith of maria and the South Pole Aitken Basin. Therefore the term “subsurface” has been used as a substitute. The understanding of the megaregolith / subsurface assists toward solving this planetary jigsaw puzzle. Although it is mentioned in a number

of papers, no systematic global study of the distribution of iron and titanium in the lunar megaregolith has previously been attempted.

1.3 Statement of relevance/ importance of this research:

1.3.1 What is the problem?

The lunar global megaregolith /subsurface distribution of iron and titanium is not well understood, and has not been studied previously on a global scale.

1.3.2 Why is it important?

The understanding of the lunar global megaregolith is fundamental to understanding the evolution of the lunar crust and impact history. The global “picture” of this study allows viewing of below surface relationships between elements (in this case iron (FeO) and titanium (TiO₂)) and different terranes. Further, it allows a view of the lunar crust that has not been previously available and is conceivable that there may be relationships that are unenvisaged at the beginning of this study. The mapping of the distribution of iron and titanium in the megaregolith/ subsurface, could be a valuable resource for proposed Moon bases.

1.3.3 What was done to address this problem?

Craters serve as natural probes into the lunar crust (Spudis and Davis, 1986; Jackson, 2001, Jackson et al., 2004). Thus, a large number of craters (2059) were selected for this study, covering a range of 60° N to 60° S latitude globally. This limitation in latitudes is because of the large angles of incidence and emergence at the lunar surface relative to the spacecraft’s instruments and the Sun’s illumination towards polar latitudes makes elemental mapping from Clementine images unreliable. From mosaicked multispectral images of Clementine data (Hapke, 1993; Nozette et al., 1994; Eliason et al., 1999), I used images of the 415 nm, 750 nm and 950 nm bandwidths¹, to produce a mosaic from which to make iron (FeO) and titanium (TiO₂) images using the techniques of Lucey et al., (1998B, 2000A, 2000B, 2000C) and IDL² software. In each crater’s ejecta, 12 measurements equally spaced around the rim were recorded, and the average weight percentage value for iron (FeO) and titanium (TiO₂) calculated.

1.4 Overview of Lunar Research

1.4.1 Formation of the Lunar Magma Ocean

¹ For definition see Harrison and Jupp (1980, p 97). A broad description is that a “bandwidth” is the range of frequencies or wavelengths that a electronic sensor can detect with respect to some specified standard.

² *Interactive Data Language is a programming language from Research Systems Inc*
<http://www.rsinc.com> which is USA company that supplies software.

It is believed that the heat from the Moon's formation (Figure 1-1) (Hartmann and Davis, 1975; Cameron and Ward, 1976) resulted in a partially or mostly molten Moon and formed a magma ocean (Cameron and Ward, 1976; Taylor, 1982, 1987). This magma ocean allowed displacement of less dense feldspathic anorthosite to the surface and denser material to move towards the centre of gravity. Figure 1-2 illustrates the two hypothetical magma ocean models (after Taylor, 2001). The [Shearer and Newsom](#) (2000) paper regarding W-Hf isotope abundances and the early origin and evolution of the Earth-Moon system indicate that the very early lunar crust was not as stable as previously thought and may therefore have implications for its differentiation.

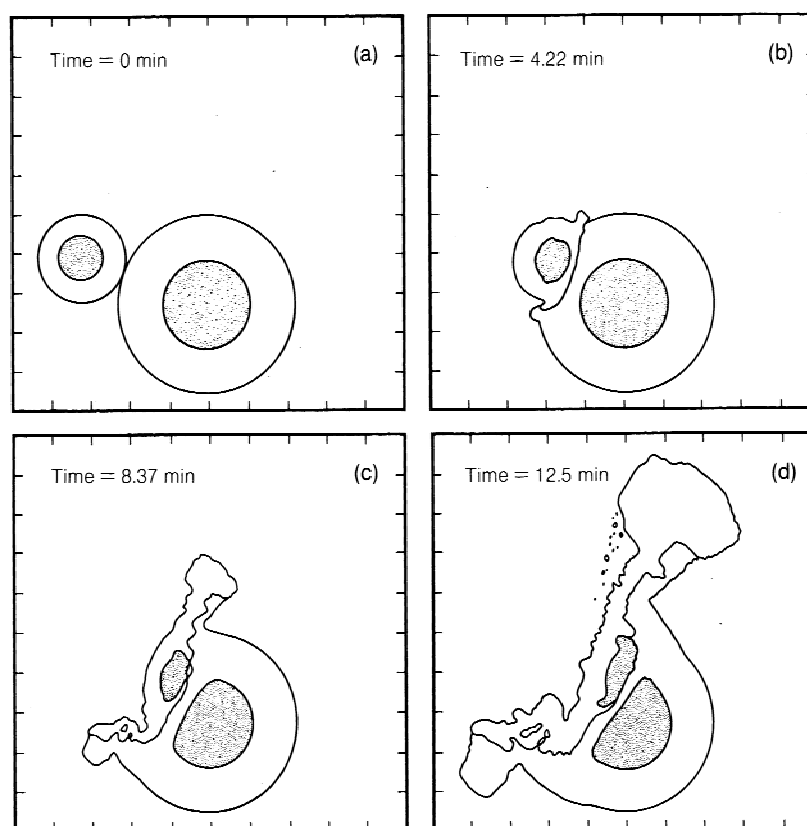


Figure 1-1 A computer simulation by Kipp and Melosh (1986) demonstrates the feasibility of the Collision theory of formation of the Earth-Moon System by the collision of a Mars size object with a proto-Earth (Hartmann and Davis, 1975; Cameron and Ward, 1976). The Figure above shows the progress of the events proposed by this model in four time frames over a period of 12.5 minutes. The smaller mass that “rebounded” into Space eventually formed the Moon, while the larger mass formed the Earth. The shaded areas represent the metallic cores and the lighter areas depict the mantle and crust. This concept is consistent with the currently accepted model of planetary accretion and formation (Taylor 2001) –see Appendix A.

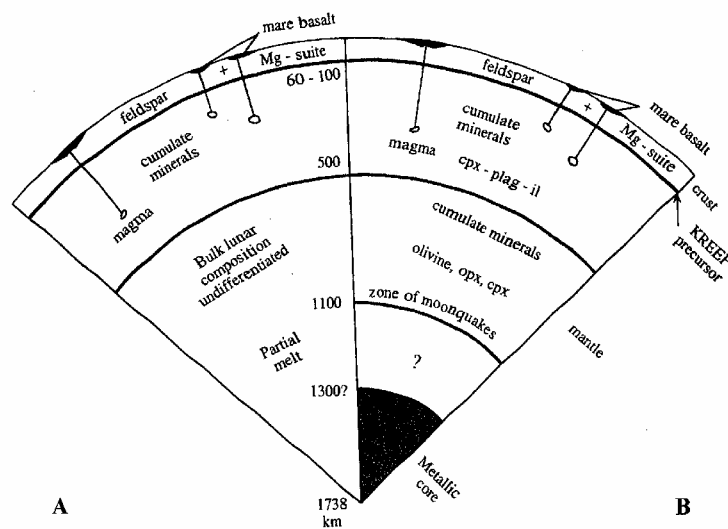


Figure 1-2 *Proposed Models of the Magma Oceans that formed following the coalescence of the Moon from the debris after its formation. As the material for the Moon coalesced, the heat from formation and of to a lesser extent, radiogenic elements; caused the Moon to be in a partially or mostly molten state and allowed material to differentiate the anorthositic and mafic materials. The model on the left indicates a partial melt that does not allow a core to form, whereas the model on the right illustrates a total melt that allows a small core to form according to Taylor, 2001.*

1.5 Crustal Formation and Structure

The lunar crust constitutes about 10% of the planetary volume (Taylor, 2001). The anorthositic material, being less dense, is displaced toward the surface where it gradually crystallised out of the magma ocean. As the surface cooled, this may have allowed “rockbergs” to develop on a sea of molten rock about 4.4 billion years ago (Herbert et al., 1977; Longhi, 1977; Hartmann et al., 2000). Convection currents in the magma ocean may have swept aside these “rockbergs”, which might explain the differences in thickness that occur in the crust – relatively thin on the near side and thicker on the far side (Taylor, 2001) (Figure 1-3). The brighter highland region is of anorthositic material on the Moon’s surface and is thought to underlie the darker basaltic mare material (Tompkins and Pieters, 1999; Taylor, 2001) illustrated in Figure 1-2. (Taylor, 2001). Norman et al. (2003) consider the best date estimate of anorthosite crystallisation of the lunar magma ocean is 4.4 (+/- 0.11) billion years ago.

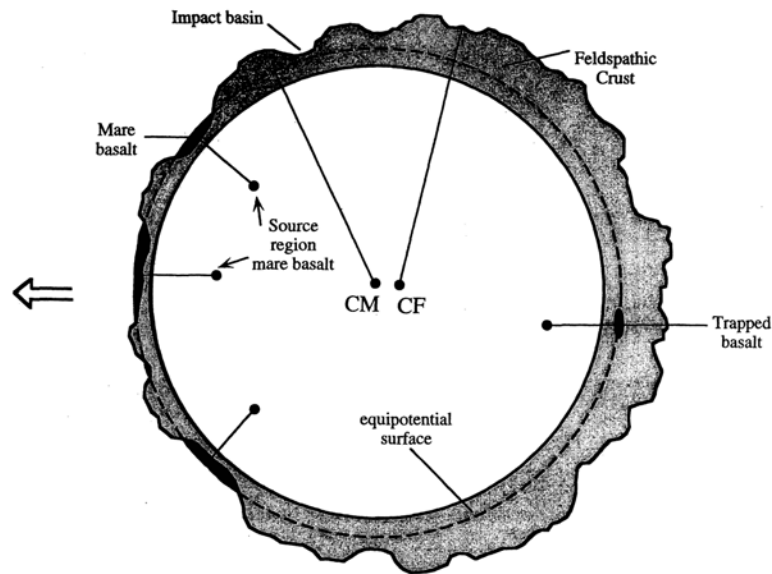


Figure 1-3 A cross section of the Moon through the equatorial plane, showing the Moon's centre of mass displaced toward the Earth's position given by the arrow. It illustrates the thinner crust on the near side and thicker crust on the far side (Taylor, 1982, 1999). CM is the centre of mass, and CF is the centre of the figure to illustrate the mass displacement (Taylor, 1982, 1999).

1.6 Craters and their Formation

Craters are a common feature on the surface of the Moon, as well as other planetary bodies. While there are a small number of volcanic craters on the Moon (Spudis, 1996, p. 116), most craters are formed by impact events that range from micro-scale to a hundred or more kilometres across to basin-forming events (Spudis, 1993; Taylor, 2001). Figure 1-4 (after Stöffler, 1981) gives a graphical representation of the formation of an impact crater. This study depends heavily on the ability of impact craters to penetrate the crust and excavate large amounts of materials from subsurface areas that are not otherwise visible.

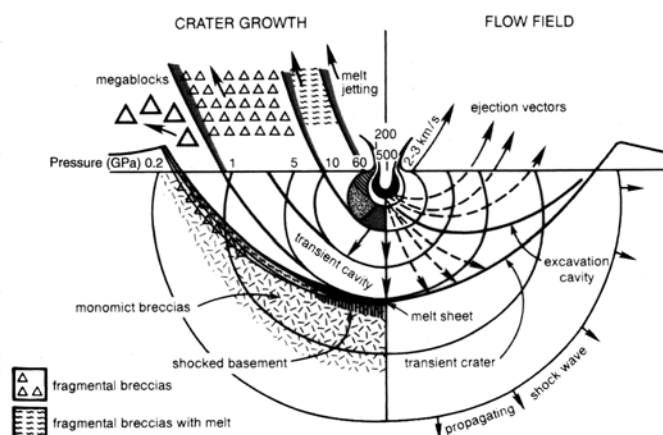


Figure 1-4 Schematic cross section through a growing impact crater. Pressures are given in giga Pascals. Figure adapted from Stöffler (1981).

1.7 Lunar Time Scale and Basin Formation

Figure 1-5 (Hartmann et al., 2000) provides a graphic representation of the evolution of the Moon over geological time from its formation around 4.5 billion years ago until today. A debate has persisted as to the rate of cratering over time (Ryder, 1990; Hartmann et al., 2000). One school of thought is that after its formation, the Moon experienced a gradual decline in impact rates, while the other school argues that there was a decline but an upsurge in major impact events or a cataclysm of basin-forming events between about 4.0 and 3.8 billion years ago, see Figure 1-6 (Ryder, 1990; Taylor, 2001). The last major basin to form was the Orientale Basin about 3.8 to 3.84 billion years ago (Hartmann et al., 2000). The two models as proposed by each school of thought can be seen in Figure 1-6 (Ryder, 1990; Hartmann et al., 2000).

The major basin-forming events (see Figure 1-5) occurred before the basalt flows that formed the maria that can be seen from Earth today (Hartmann et al., 2000). A reconstruction has been attempted (Figure 1-7) to illustrate basin formation before and after maria formation (Figure 1-8) (Wilhelms and Davis, 1971; Taylor, 1982).

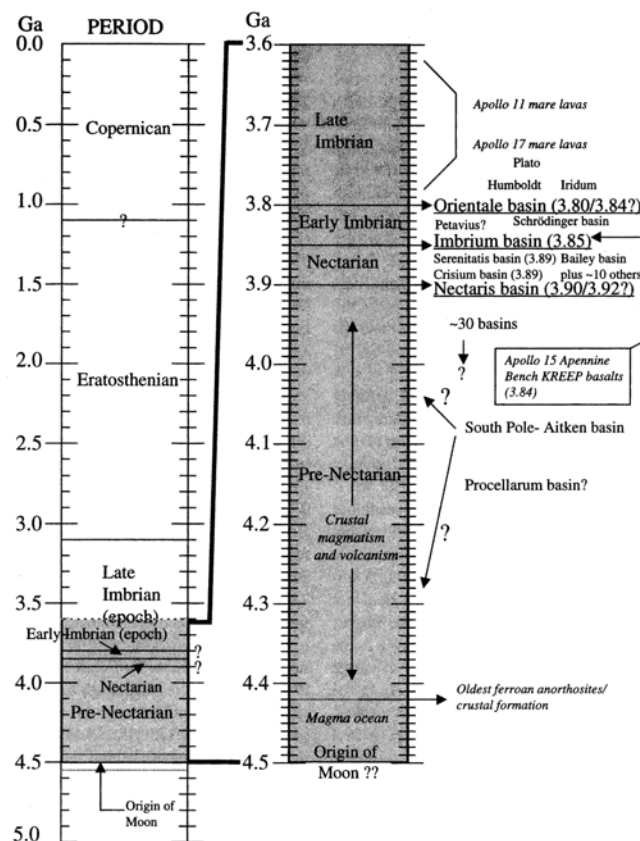


Figure 1-5 Chronostratigraphic columns for lunar history with relative stratigraphy (after Hartmann et al., 2000; based on Wilhelms, 1984, 1987).

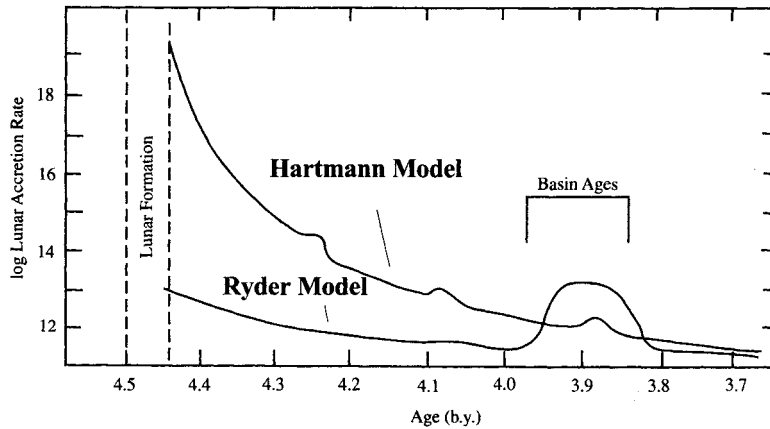


Figure 1-6 The two interpretations of lunar bombardment history. The upper line, proposed by Hartmann represents a continuously declining flux with some minor superimposed spikes. The lower line proposed by Ryder assumes that the Moon was fully accreted 4.4 billion years ago and little has been added since. In the latter interpretation, there was a sudden spike or cataclysm of impact events around 4.0 – 3.85 billion years ago. Figure adapted from Ryder (1990).

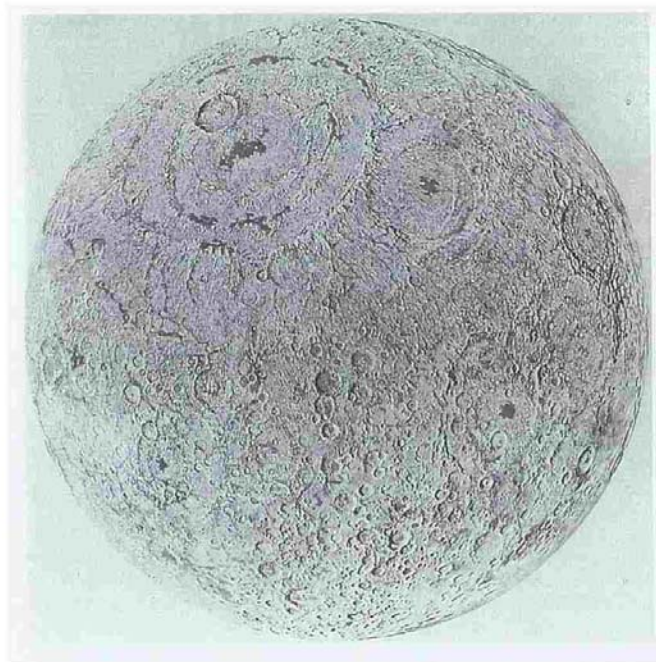


Figure 1-7 This figure depicts a reconstruction of the face of the Moon about 3.9 billion years ago. This is after the impact that formed the Imbrium basin. The Highland surface is shown prior to mare basalt flooding (Wilhelms and Davis, 1971). Colours in this figure are an artefact of the image reproduction process and have no meaning.

1.7.1 Mare Formation, Basalt, K.R.E.E.P. Basalt, and Sources

By about 3.2 billion years ago, the lunar maria had assumed an appearance that should look familiar to observers today (see Figure 1-8). The basin-forming impact events no doubt weakened the crust and allowed material from magma source zones at depths from about 200 to 450 km to flow to the surface to form the maria, see Figure 1-2 (Taylor, 2001).

However, the maria are not all at the same topographic level (Taylor, 2001), and this would suggest that different basalt sources produced flows at different times, with different durations, and from different depths. The cause of these flows was probably a partial melt of material at depth because of heat conducted through the mantle from the core, and from radiogenic elements (Taylor, 2001). It is unclear, at this time, whether the lunar core is hotter than the mantle but it is suggested as an additional heat source to radiogenic elements.

An understanding of nature of basalts can be complex as there are over 20 types of basalts known (Taylor, 2001). Mare terrane, where most surface basalts are found, has fewer craters, and especially very few larger craters maria are therefore interpreted to be younger than Highland terrane.³

“K.R.E.E.P.”⁴, in addition to trace elements (such as Uranium, Thorium, Barium, Rubidium, Caesium, Zirconium, and Phosphorous), material is incompatible in the crystallisation process with the olivine, orthopyroxene, clinopyroxene, plagioclase and ilmenite in the cumulative minerals of the lunar mantle. This K.R.E.E.P. was displaced to the uppermost level of the mantle, toward the underside of the anorthosite crust (Taylor, 2001), although the K.R.E.E.P. may have mixed in with other material through cumulative overturn according to Spera (1992). K.R.E.E.P. basalt is believed to form as magma passed through this zone of K.R.E.E.P. enrichment, causing partial remelting and mixing with the molten basalt (Taylor, 2001). This material was then deposited on the surface as mare flood basalt (Taylor, 2001). The observation that not all mare basalts are K.R.E.E.P. basalts may indicate that the accumulation of K.R.E.E.P. may have become localised over geologic time. In some places, there may be almost no accumulation, but apparently relatively large accumulations do exist in other areas of the sub-crust to give rise to these K.R.E.E.P. enriched basalts. A thorium “hot-spot” was geographically defined from Lunar Prospector data centred on Mare Imbrium and eastern Oceanus Procellarum (Haskins, 1998). This thorium concentration has a localised relationship with K.R.E.E.P. enriched basalts and were discussed by Laurence et al. (1998) and Haskin (1998).

Despite the large surface area covered by mare basalts (17% of the Moon’s surface; Taylor, 1982), these basalts represent only around 0.1% of the Moon’s crustal volume (Taylor, 1999).

³ Regions of low crater density per unit area imply a surface that has not been exposed as long as a surface with more craters per unit area. The shorter time exposure allows reduced chance for possible impacts by meteorites. Hence, a surface with fewer craters is younger.

⁴ K.R.E.E.P. consists of Potassium (K), Rare Earth Elements (La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu) and Phosphorous.

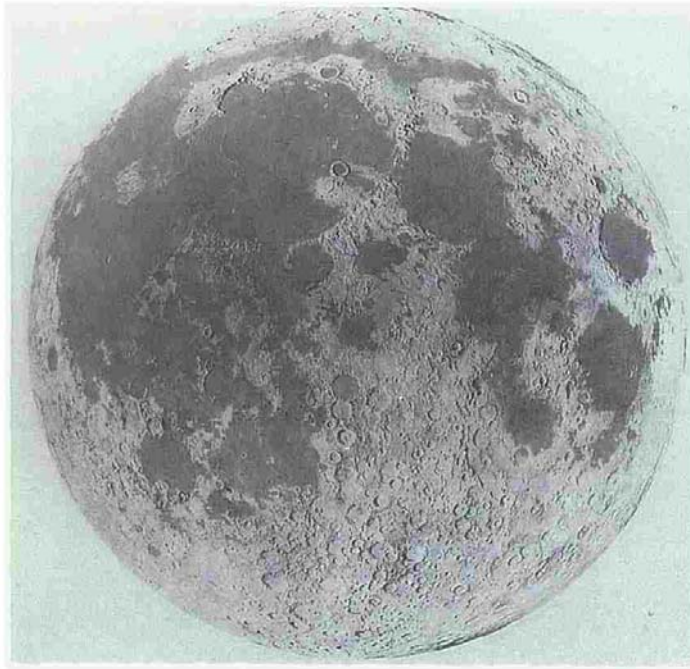


Figure 1-8 A reconstruction of the Moon at 3.2 billion years ago at the end of the period of mare basalt flooding. This was prior the formation of craters such as Archimedes, Plato, and Sinus Iridium. (Wilhelms and Davis, 1971). Colours in this figure are an artefact of the image reproduction process and have no meaning. For a global topographic view of the Moon today see Appendix B.

The lunar surface layer (regolith) has been studied by various workers for the last few hundred years by telescopic means. In more recent times, this analysis has been augmented by data from manned and robotic missions. These data sources include such missions as the Lunar Orbiters, and the Apollo missions of the 1960s and 70s, the Soviet Luna 16, 20, and 24 sample return missions to the eastern limb of the Moon, Clementine (1994), and the Lunar Prospector (1997) Orbiter.

In 1999, Tompkins and Pieters produced a map of the crustal bedrock rock-types using Clementine spectral data for the central peaks of large craters (diameters > 40 km), which consist of material uplifted from a depth of ~ 8 to 20 km. However, the layer in between the thin surface regolith and basement rock has not been studied previously on a global scale. This layer is the focus of this present study and is called the “megaregolith”.

1.8 Definitions and background

The term “Megaregolith” was first coined by Hartmann (1973) to describe “the result of intense pre-mare cratering effect on the subsurface resulting in fragmental material”. Hartmann (1999) describes the “megaregolith” as being the “product of the cataclysm (intense lunar bombardment)... at least a few kilometres deep...”. He further describes megaregolith as being derived from repeated impacts that penetrated and pulverised the thin surface layer of solid material and consisting of “mixed mineral fragments, dust, and splashed magma (glass?)” that occurred early after the Moon's formation and before the lithosphere was completely formed within the first 100 million years” (see Figure 1-5).

For the purpose of this thesis, "megaregolith" is defined as the impact-processed debris layer that makes up the outer few kilometres but excluding the surface regolith of the Moon's Crust (see Figures 1-9 and 1-10). For some deep maria, the term "megaregolith" that is usually applied to anorthosite /anorthositic material may not be technically correct and "subsurface" would be a more accurate term for the basaltic coverage of maria.. Nevertheless, for simplicity, the term "megaregolith" will be used throughout this thesis.

The megaregolith overlays the entire Moon beneath the thin surface regolith and an understanding of its nature is necessary in order to reconstruct the composition of bulk crust of the Moon, and understand its development over geological time.

The lunar crust can be viewed as three parts; the regolith, megaregolith, and bedrock (see Figure 1-9). The lowest, bedrock layer of 60 - 80 km thickness is only visible in the central peaks of large craters (Tompkins and Pieters, 1999). Above this is the megaregolith of a few kilometres thickness, and this material can be seen in the ejecta of craters that do not have central peaks. The smaller craters do not penetrate into the bedrock region but do penetrate into the megaregolith. The overlying regolith is a layer up to a few tens of metres thick, but it varies in thickness from place to place (McKay et al., 1974; Langevin and Arnold, 1977).

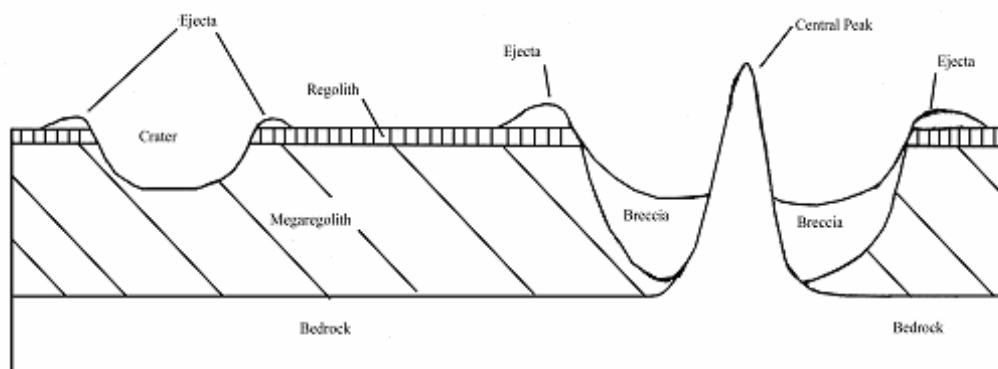


Figure 1-9 *Crustal structure of the Moon. The uppermost level consists of the regolith layer of up to a few metres in thickness. Below that is a megaregolith of up to several kilometres in thickness, in Highland regions, overlying the bedrock.*

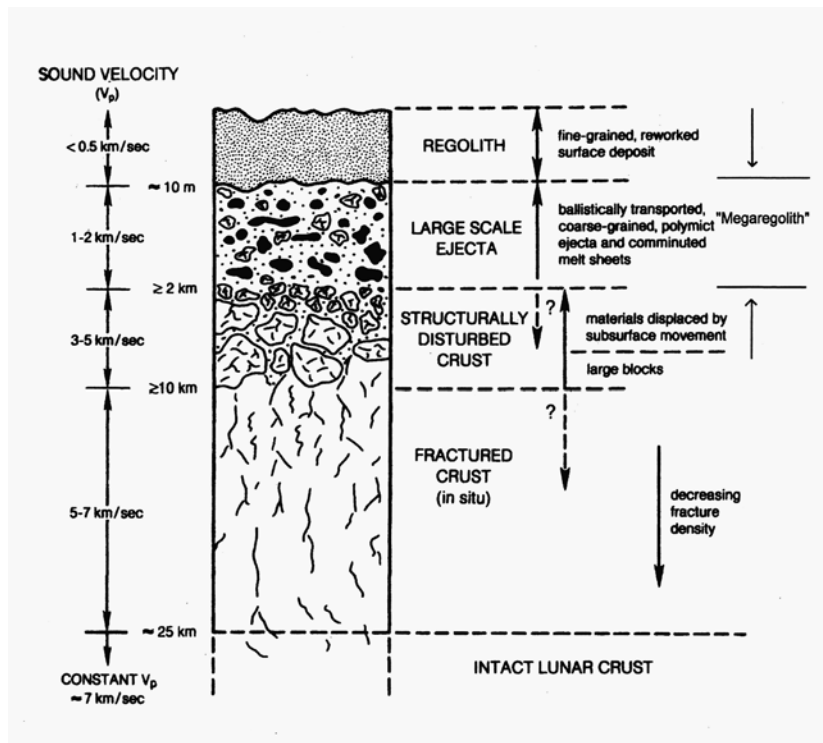


Figure 1-10 Schematic cross-section (after Heiken et al., 1991, p.93) illustrates the effects of large scale cratering on structures of the upper crust such as the formation of megaregolith. This is inferred from seismic experiments (Toksoz et al., 1973). The depth in the schematic figure is highly uncertain because the total volume of large basins and craters remains unknown.

1.9 Goals of the Study

The goals of this thesis are to:

- i) Characterise the composition of the megaregolith globally and by terrane in terms of iron (FeO) and titanium (TiO₂) concentrations.
- ii) Relate the megaregolith composition (iron and titanium) to the underlying crust.
- iii) Decipher the major processes responsible for the growth and evolution of the megaregolith.
- iv) To investigate on a global scale if there is any distinct difference between the megaregolith and overlying regolith.

2 METHODOLOGY

2.1. *Analysis of Clementine data*

This chapter presents an overview of the technique used for studying the lunar megaregolith by analysis of crater ejecta imaged by the Clementine mission.

2.1.1 Megaregolith Composition Characterisation

Crater ejecta can be used to characterise the composition of the megaregolith using craters as natural drill holes or probes (Spudis and Davis, 1986; Jackson, 2001) and the ejecta as “drill-cores” (Boroughs and Spudis, 2001; Jackson, 2001). Croft (1980), Grieve (1981) and later workers showed that for simple craters the effective depth of excavation is about ten percent of the diameter. Therefore, simple craters with diameters of approximately 5 to 50 km provide sample depths of approximately 0.5 to 5 kilometres. This approach, when coupled with the 1994 Clementine lunar orbiter mission and crater observations (Pieters et al., 1994), provides an excellent method to sample the megaregolith and determine its composition.

The 2059 craters selected for this study cover a range of 60° N to 60° S latitude globally, this limitation in latitudes is because of the large angles of incidence and emergence at the lunar surface relative to the spacecraft’s instruments and the Sun’s illumination towards polar latitudes makes elemental mapping from Clementine images unreliable. From mosaicked multispectral images of Clementine data (Hapke, 1993; Nozette et al., 1994; Eliason et al., 1999), I used images with bands¹ centred on 415 nm, 750 nm and 950 nm (Nozette et al., 1994; Lucey et al. 2000) (Dury, 1990; Harrison and Jupp, 1989), to make a three-layer mosaic from which to make iron (FeO) and titanium (TiO₂) images employing the techniques of Lucey et al. (1998B, 1998C, 2000A, 2000B, and 2000C) and IDL software (www.rsinc.com). In essence, the Lucey et al. methods use Apollo lunar samples to provide a “ground-truth” for calibrating remote sensing data and are widely used by researchers involved in lunar studies. In this work, the data were subsampled to 200 m/pixel. The iron and titanium global images were divided into 4 sectors, each 70 degrees in latitude and 90 degrees in longitude, to make the images easier to handle in a PC Linux system environment for analysis using ISIS image software provided by the US Geological Survey, Flagstaff, Arizona USA.

For each bin of 10 degrees latitude by 10 degrees longitude, three to four craters were selected, based on pristine appearance (sharpness of the crater rim), and what property of diameter. Older craters of eroded or worn appearance or those with ejecta partly or totally covered or obscured by basalt flow material were excluded. Rare twinned craters were similarly not used, except where there were no others available. When twinned craters were analysed, only one of the twins was selected and the section of wall that was common was avoided, as the position of the ejecta blanket is not clear in these cases. Asymmetric craters (e.g. elliptical in plan) were measured equal distances outward from the rim along both axes of symmetry; these

¹ Dury (1990) defines a “band” as, “In remote sensing, a band is a range of wavelengths from which data are gathered by a recording device.”

craters make up a very small fraction (< 1 percent) of the population. The data were entered into a spreadsheet. Parameters used were: a sequential unique number for each crater (arbitrarily assigned numbers), name of crater (if known), (centre) latitude/ longitude, diameter of crater, iron (FeO) and titanium (TiO₂) weight percentage. The average weight percentage and standard deviation were calculated from the data points in the ejecta around each crater. The province locations, Highland, Mare, and South Pole Aitken basin (SPA) were based on the terrane mapping of Jolliff et al. (2000) and were also recorded on the spreadsheet. The mapping of Jolliff et al (2000) was defined by distinct geomorphology, surface geochemistry derived from Clementine spectral data, and petrologic history divisions, not prejudiced by statistical clustering effects. This mapping is used as a reference for comparison and further study. Individually assigned numbers for each crater allows the use of Geographic Information System software such as ArcGIS 8.3 (www.esri.com) for mapping. Topographical maps (Weir, 1990; Rukl, 1996; and Gillis, 2001) and the photographic atlas of Kosofsky and El-Baz (1970) were used for this study.

Using linked iron (FeO) and titanium (TiO₂) images (Lucey et al., 2000A) in ISIS (US Geological Survey Image Software), 12 points were selected just outside the crater rim in the crater ejecta. By use of a computer cursor to indicate each of the 12 points in the ejecta around each crater in the images, the ISIS software provided weight percentage measurements for iron and titanium that were recorded to one decimal place. The ISIS software allows iron and titanium measurements to be located in precisely the same position. For each crater, the consecutively placed points were taken initially from the 12.00 o'clock position and then visually spaced counter-clockwise. Occasionally, a point was taken further away, but less than one crater radius distance, so that the reading remained in the ejecta blanket. At each location, twelve readings for iron and titanium values were recorded for each crater onto the spreadsheet and then an average and standard deviation value were calculated using the spreadsheet functions.

The data points for each crater were hand-selected and measured rather than using an automated software process. Although exceedingly time-consuming, this approach enabled the measurement process to take account of anomalies (such as minor breaks) in the crater rims, and ejecta blanket asymmetry.

2.2 Crater diameter-depth relationship

As indicated previously, the depth for simple craters is about ten percent of the diameter (Croft, 1980; Grieve, 1981). This relationship is coupled with crater ejecta analysis to gain an understanding of the lunar subsurface iron and titanium distribution and depth of anorthosite, basalts and the megaregolith. Since in this study the maximum crater diameter is 50 kilometres, the maximum possible depth sampled will be 5 kilometres. Craters with diameters smaller than 5 kilometres have not been selected, as they would have insufficient depth for study of the megaregolith.

3 RESULTS

3.1 *Results of Crater Ejecta Measurements*

Chapter 3 presents the results of measuring iron (FeO) and titanium (TiO₂) levels in crater ejecta, using the Lucey technique (Lucey, 2000A).

Iron and Titanium Distribution Analysis

The data (see Appendix C) for individual craters were used to construct an Iron Distribution Map (Figure 3-1) and a Titanium Distribution Map (Figure 3-2) for the lunar megaregolith. Each dot in the maps represents an individual crater position, and an average of the weight percentage for twelve points in the crater ejecta for iron or titanium, respectively.

As expected, the data as shown in Figure 3-1 reveal the high concentrations of iron in the megaregolith of the basaltic maria. However, the Figure also reveals an area of highland megaregolith richer in iron than expected (Jackson et al., 2004; Spudis et al., 2004). In contrast, other highland megaregolith material has a lower FeO value, of between 0.0 and 3.7 percent (grey dots), which is expected for anorthosite or similar low-iron content material.

The surface of the highland region with elevated iron is interpreted as being anorthositic (Jolliff et al., 2000; and other workers). This unit of highland megaregolith with higher than expected iron content shall be referred to as “Highland II”, and is found in areas that surround and lie between most maria (see Figure 3-1). The range of these enhanced iron values (pink dots) in the highlands megaregolith is from 3.8 to 6.4 weight percent. Jolliff et al. (2000) refer to the surface over this area as “eastern basin terrane”. This new and surprising result of elevated iron in the highland megaregolith will be expanded upon in the Discussion chapter of this thesis.

From the data set, mare iron (FeO) values range from 6.5 to 18.3 weight percent. These high values are as expected for basaltic areas since basalt is higher in iron than anorthositic highland areas (Heiken et al., 1991, pp. 121-181; Lucey et al., 1995; and Spudis, 1996, p. 273). The data set clearly reveals this. There appears to be a grading of intensities of iron weight percentage values in maria areas, and a trend of decreasing iron values from the centre of maria into the anorthosite.

In some parts of the South Pole Aitken (SPA) basin and its surrounding area, volcanism has occurred (Pieters et al., 2001). These areas exhibit higher iron content of mostly 9.8 to 13.3 percent, although a few points are between 13.7 to 18.3 percent (Figure 3-1), as well as moderately higher titanium content from 1.1 to a maximum of 4.9 weight percent (Figure 3-2) in parts of the basin. Over the remainder of the South Pole Aitken basin, high iron values are observed. The higher iron content of South Pole Aitken basin megaregolith may not entirely be due to basalt flow, but instead due to the exposure of lower crust (Lucey et al., 1998A). This will be discussed later in this thesis.

Apart from the maria and South Pole Aitken basin, other areas with elevated megaregolith iron or titanium values consist of single isolated crater ejecta (see Table 3-1). Such isolated values are not understood; however a possible explanation is given in the Discussion chapter of this thesis.

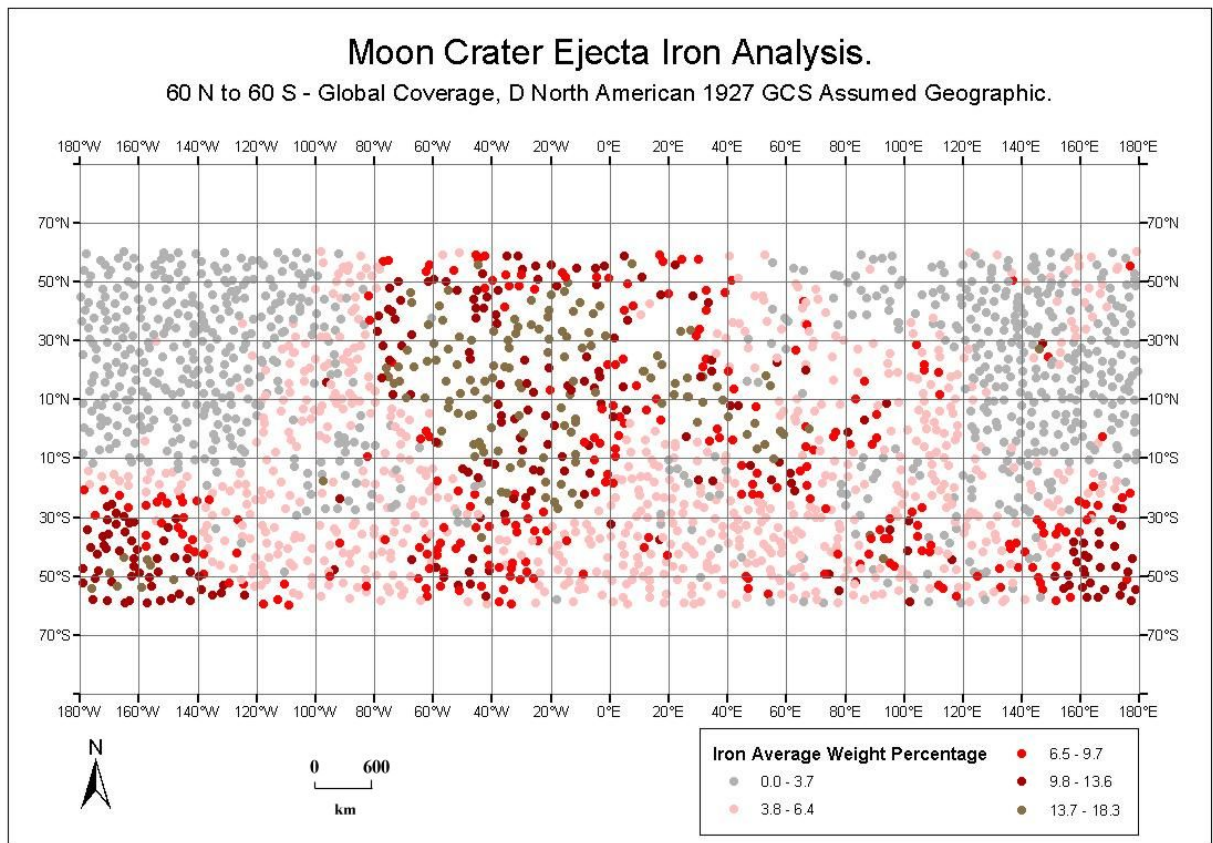


Figure 3-1 Lunar Megaregolith Iron Distribution Map (updated version of Spudis et al., 2004 with the inclusion of some revised values), resulting from analysis of average iron weight percentage of crater ejecta of craters 60° N to 60° S. The craters investigated were between about 5 and 50 km in diameter. Blank areas between data points indicate uncratered areas or no data due to lack of useable craters. GIS Software divided the range of iron values into 5 classes or groupings. The scale is 1degree = ~32 km, (Lunar and Planetary Institute, www.lpi.user.edu/clemen/ website 2004.)

The Titanium Values Distribution Map (Figure 3-2) reveals the high levels of titanium in northern Oceanus Procellarum megaregolith (an average of 5.0 to a maximum of 11.1 weight percent) and neighbouring maria due to titanium-rich basalt flows. These high values are expected from previous work of Lucey and other workers. However there are no unexpected high values for titanium in localised areas of the highland region that coincide with the enhanced iron values previously described, such as those surrounding the various maria (Jackson et al., 2004). There appears to be no apparent common areal relationship between the iron and titanium values on a global scale, and only a partial agreement in the maria. In some small highly localised Highland areas, there are isolated, anomalous iron and titanium-rich readings (see Table 3-1).

Table 3-1 *Crater Ejecta containing Anomalous Iron (FeO) and Titanium (TiO₂) Values.*

<u>Crater</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Iron Av</u>	<u>Ti Av</u>	<u>Notes</u>
<u>Number</u>			<u>Wt percent</u>	<u>Wt percent</u>	
846	15.6	-96.2	10.9	3.0	Highland
1061	50.5	-24.4	10.3	2.3	Highland
1062	52.2	-29.9	9.5	1.2	Highland
1106	54.4	-4.6	11.2	0.6	Highland
1119	17.5	-3.3	10	1.4	Highland
1128	45.5	17.5	10.1	0.9	Highland
1189	-37.9	16.9	10.9	1.3	Highland
1276	-19.8	37.3	4.6	1.3	Highland / Mare border
1547	-44.7	116.2	10.4	1.1	Highland
1694	-38.4	157.7	11.1	1.1	Highland
1738	-43	161.5	12.4	1.4	Highland
1739	-49.6	161.6	12.4	1.2	Highland
1760	-46.7	172.2	10.2	0.8	Highland
1761	-44	177.8	11.8	1.0	Highland
1762	-40.2	171.7	10.2	1.1	Highland
1763	-32.7	174.1	12.4	1.7	Highland
1791	-26.4	-170.7	11.8	1.0	Highland
1792	-34.2	-177.5	11.4	1.2	Highland
1793	-31.1	-170.6	12.6	1.8	Highland
1794	-36.8	-172.3	11.9	1.4	Highland
1832	-29.8	-165	10.9	1.2	Highland
1833	-28.6	-167.8	11.4	1.5	Highland
1836	-25.7	-169.2	10.2	1.2	Highland
1891	-48.7	-142.3	13.1	0.9	Highland
1892	-44.3	-143.7	10.3	0.7	Highland
1895	-43.7	-147.8	10.1	1.0	Highland
1900	-30.5	-147.3	10.1	1.0	Highland near small Mare.
2185	-39	-50.8	8.1	1.7	Highland
2215	-44.1	-46.4	10.2	1.1	Highland / Mare
2247	-31.2	-35.3	8.4	1.4	Highland
2350	-10.5	-5.1	8.6	1.0	Highland / Mare

Mare Moscoviense on the lunar farside has a titanium megaregolith value of up to 7.8 weight percent and coincides with high iron values that indicate a predominately titanium-rich basalt source.

Around the vicinity of the South Pole Aitken basin there are higher titanium values of between 1.1 and 4.9 weight percent and these values are apparent in Figure 3-2. These values coincide with iron values in the 6.5 to 9.7 percent range and there are even a few points of iron values range from 9.7 to 13.6 percent. Just within the northern boundary of the South Pole Aitken basin, there are titanium

values of between 1.0 percent and 2.5 percent (Apollo basin maria). There are higher iron values that coincide with these titanium values as a result of titanium-rich basalt flows (Pieters et al., 2001).

Outside the South Pole Aitken basin are other areas with isolated higher titanium readings; however, these all coincide with higher iron values. Such results have been interpreted in terms of localised minor titanium-rich basalt flows. Overall, the surface and megaregolith signatures for titanium distribution are thus essentially the same. A number of anomalous higher titanium weight percentage value points exist outside the maria and South Pole Aitken basin; these are listed in Table 3-1.

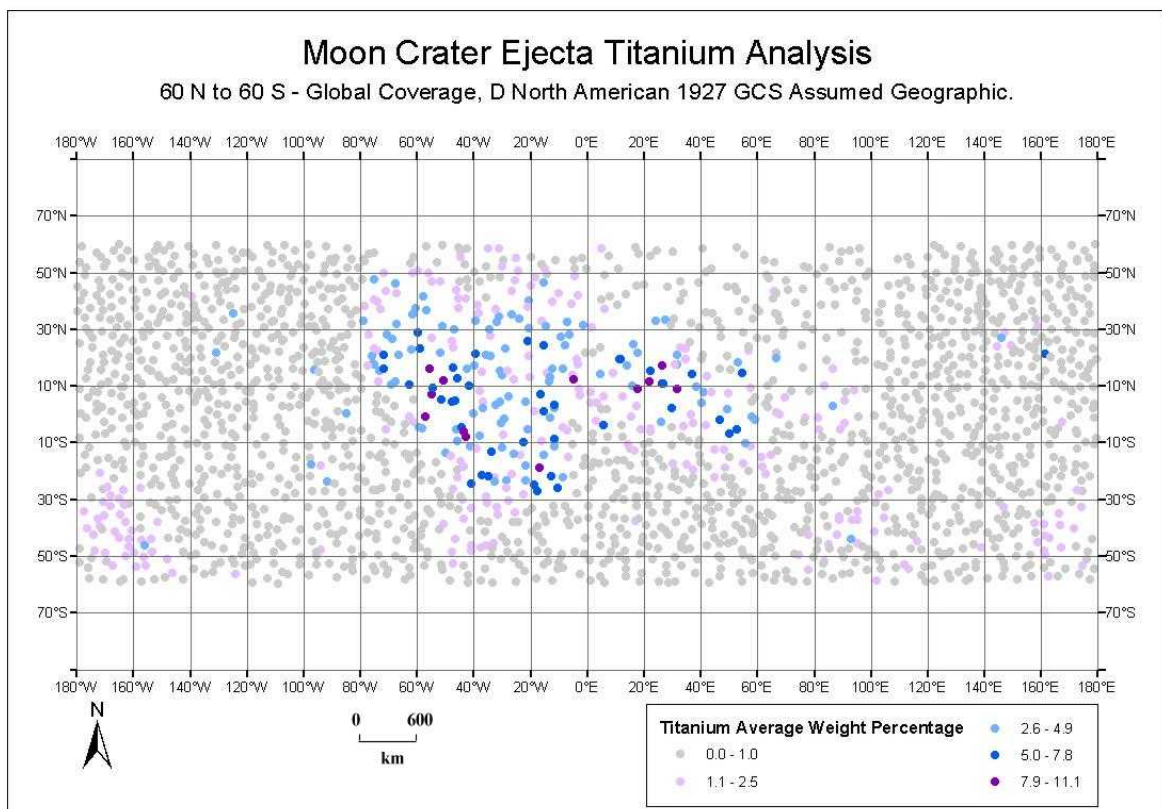


Figure 3-2 Lunar Megaregolith Titanium Distribution Map, resulting from analysis of average titanium percentage of crater ejecta of craters 60° N to 60° S. The craters investigated are between 5 and 50 km in diameter. Blank areas between data points indicate no data due to lack of useable craters or lack of craters. As in the Figure 3-1, the GIS software divided the titanium values into 5 classes or groupings. The scale is 1degree = ~32 km, (Lunar and Planetary Institute, www.lpi.user.edu/clemen/ website 2004.)

3.2 Graphical and Statistical Analysis of Results

The results are analysed by separating them into iron and titanium data for distinct Global, Highland, Mare, and South Pole Aitken basin regions (based on the province criteria of Jolliff et al., 2000). For each region (Highland, Mare, South Pole Aitken basin) from the spreadsheet, a simple individual scatter plot is constructed for analysis of “Iron”, or “Titanium” with axis titles “Weight Percentage” versus

“Crater Diameter”. Each is accompanied by an analysis plot of “Iron (FeO)” and “Titanium (TiO₂)” with a one standard deviation bar for each grouping of mean crater diameter. The axes of these plots are “Mean Weight Percentage Values” versus “Crater Mean Diameter in kilometres” with craters from 5 to 50 km with intervals of 5 km and 10 km. These plots are accompanied by related data tabulation that provides sub-population information for each grouping, and the standard deviation.

In the analysis plots, the vertical bars represent a range of one Standard Deviation from the mean for each grouping. An analysis program written in IDL groups crater mean diameters into increasing 5 km diameter bins from 0 to 50 km, and calculates error bars on the basis of one standard deviation from the mean of iron and titanium values for a given crater range. For example, craters of 5 to 10 kilometres in diameter would have a mean of 7.5 kilometres. Similar plots with 10 km intervals have been constructed for comparison. The associated tables of data (Tables 3-2 to 3-17) provide the total numbers of craters, and the number of craters for each crater range analysed.

A small number of craters (approximately less than 1 percent of the entire data set) overlapped the Highland and Mare terranes. In these cases, a determination by iron (FeO) weight percentage was made as to which category each crater belonged - whether they were more in Highland or more in Mare in conjunction with Clementine spectral data. A number of anomalous iron and titanium values are listed and described in Table 3-1. These craters and ejecta listed in Table 3-1 would seem to warrant a much closer study as these anomalies may indicate unique histories or unusual processes at those locations. The study of these anomalies is listed in the section for “Future Work”.

3.2.1 Global Iron

Although Global Iron analysis combines three different terranes (Highland, Mare, and South Pole Aitken basin), the vertical (as opposed to lateral) distribution of iron (FeO) in the megaregolith/subsurface on a global scale has never been investigated, and is thus studied here to see what trends or anomalies (if any) exist. Figure 3-3 shows the distribution of iron (FeO) on a global scale. This takes in account all terrane types. Smaller diameter craters are much more populous than large craters. The iron weight percentages for the smaller craters cluster at low iron values, but a number of craters with high iron values are evident. In contrast, the smaller population of larger diameter craters tends to have greater variance in iron weight percentage values.

In Figures 3-4, and 3-5, Tables 3-2 and 3-3 in the analysis of global iron values in the megaregolith, the error bars in the Figures represent one standard deviation from the mean in the iron values in each grouping. The increasing size of the error bars with diameter thus reflects the decreasing number of craters available for measurement. These larger craters are more widely scattered across different lunar terranes.

The lunar globe comprises three terrane types, namely Highland, Mare, and South Pole Aitken. Each of these terrane types has a very different level of iron. Therefore, a large standard deviation in iron can be expected amongst craters that span more than one terrane type. Because the predominant material appears similar, craters in terrane of a similar type might be expected to have a small range in

standard deviation values, craters of similar diameter in Highland areas surrounding basins are of elevated iron content (3.8 - 6.4 %) that is defined here as Highland II and increases the standard deviation, when compared to the population of craters in the Highland areas of lower iron (0.0 – 3.7%) that is defined as Highland I. Regions of elevated iron values in the lunar highland megaregolith classified as Highland II in this paper and are a new discovery. See Figure 3-1 for the global distribution of iron values in the megaregolith. The scatter in iron concentrations in larger global crater population sizes may in part be due to some craters excavating into source areas of basalt, while others have excavated areas of iron-poor anorthosite or similar material. Table 3.2 provides further details.

Broadly, the mean weight percentages of iron were both found to decrease with depth in the highlands. In mare areas iron again appears to show a decrease with depth to about 1 km from approximately 14.25 % to 12 %, where the iron values remain at approximately 12 % to a depth of about 1 - 3.5 km, followed by an increase to approximately 14.5% at even greater depths from about 3.5 to 4.5 km. In the more limited South Pole Aitken basin dataset, iron displayed an apparently uniform concentration with depth.

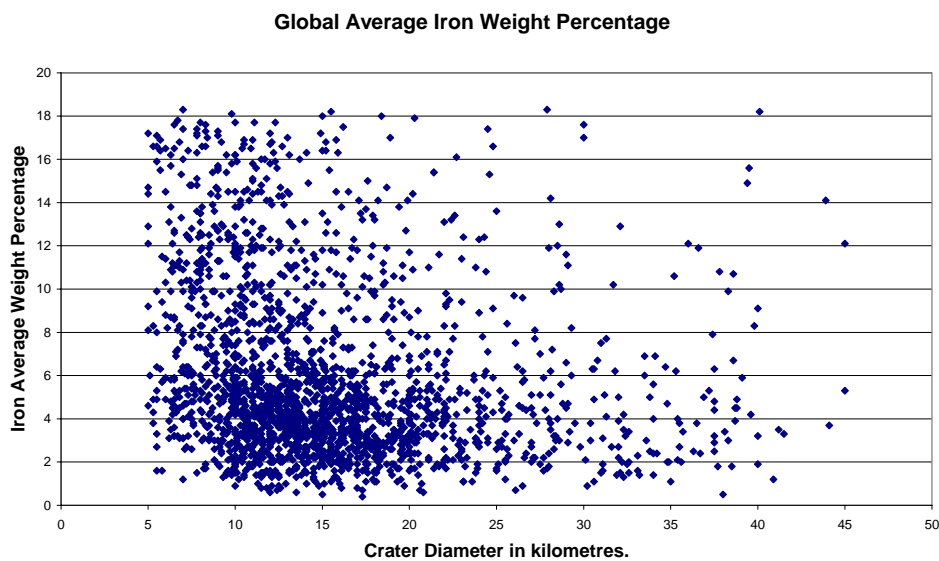


Figure 3-3 *Graph of Global Average Iron Weight Percentage vs. Crater Diameter.*

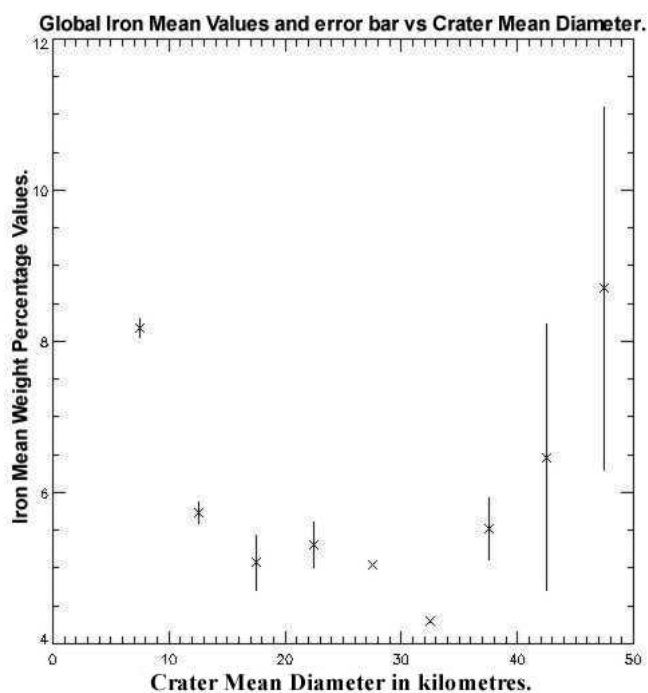


Figure 3-4 Plot of Global Iron using one standard deviation (bars) relating to crater mean diameter at 5 kilometre intervals.

Table 3-2 Average Global Iron compared with mean crater diameter (5 km intervals).

Table of Global Crater Ejecta Analysis for Iron.			
Crater count = 2059			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5 km	0	n/a	n/a
5 to 10 km	386	8.18	0.12
10 to 15 km	793	5.73	0.14
15 to 20 km	481	5.07	0.37
20 to 25 km	199	5.31	0.30
25 to 30 km	92	5.04	0.01
30 to 35 km	56	4.29	0.01
35 to 40 km	41	5.52	0.41
40 to 45 km	9	6.47	1.76
45 to 50 km	2	8.70	2.40

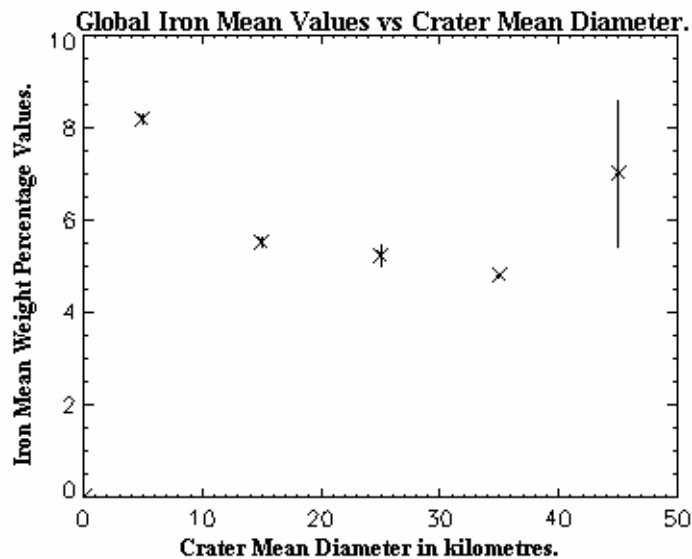


Figure 3-5 Plot of Global Iron using one standard deviation (bars) relating to crater mean diameter at 10 kilometre intervals.

Table 3-3 Average Global Iron compared with mean crater diameter (10 km intervals).

Table of Global Crater Ejecta Analysis for Iron.			
Crater Count = 2059			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5-10 km	386	8.2	0.1
10-20 km	1274	5.5	0.1
20-30 km	291	5.2	0.3
30-40km	97	4.8	0.06
40-50 km	11	6.9	1.6

3.2.2 Highland Iron

The Highland iron distribution graph (Figure 3-6) suggests a decline in iron concentration with increasing depth. A few outlying points appear to have exceptionally high iron values (16 to 18 percent). These outliers in some sections of the highlands may be mixed with cryptomaria¹ (Head and Wilson, 1992), some basin ejecta, or intrusive material.

Figures 3-7, 3-8 and Tables 3-4, 3-5 in the analysis for Highland Iron (FeO) reveal a similar pattern as for Global Iron, except the values of iron are lower and decrease with depth throughout. As is the case for the Global Iron data, the Highland Iron data relies on fewer points at larger crater diameters and hence produces larger statistical uncertainty. In Figure 3-7 the largest craters shows a

¹ Cryptomaria are maria that existed before the maria that we now observe on the Moon. In some geological circles the term "Paleomaria" would have been preferred; however it was first described and published as "cryptomaria".

significant increase in iron content that could infer that in that area at that depth of about 45 – 50 km there may be some small mafic (basaltic?) bodies that has been excavated with the anorthosite in the ejecta or it has partly excavated into mafic material. A decline in iron is indicated with increasing crater diameter from 5 km to 15 km size range; however the iron content seems to be of similar values for the 15 to 50 km crater size ranges.

Interestingly, a point of note in Table 3.2 is that crater size range from 15 to 20 km has a standard deviation of only 0.02 which is extremely small. This may indicate that material at the level over the Highland region have almost no variation and therefore of a similar type, defined by iron content. Similarly the same might be said of the 5 to 10km size range with a standard deviation of only 0.03, and of the 30 to 35 km size range with a standard deviation of only 0.08. These depth infer the approximate excavation – the greater the diameter the greater the depth (Croft 1980, Grieve 1981). These standard deviations may indicate that excavations to certain depths do not encounter iron-bearing bodies, while excavations to other depths do encounter other iron-bearing bodies (basalt?). The larger standard deviation in other size ranges may indicate that some craters are excavated where iron bearing bodies (basalt?) also exist and others do not. Perhaps, there may be mafic (basaltic?) intrusions into the Highlands megaregolith because of weaknesses in the crust at particular levels that may allow pathways for the magma. Basin ejecta would not seem to explain these observations as a more blanketing effect might be expected, as indicated by Haskins (1998).

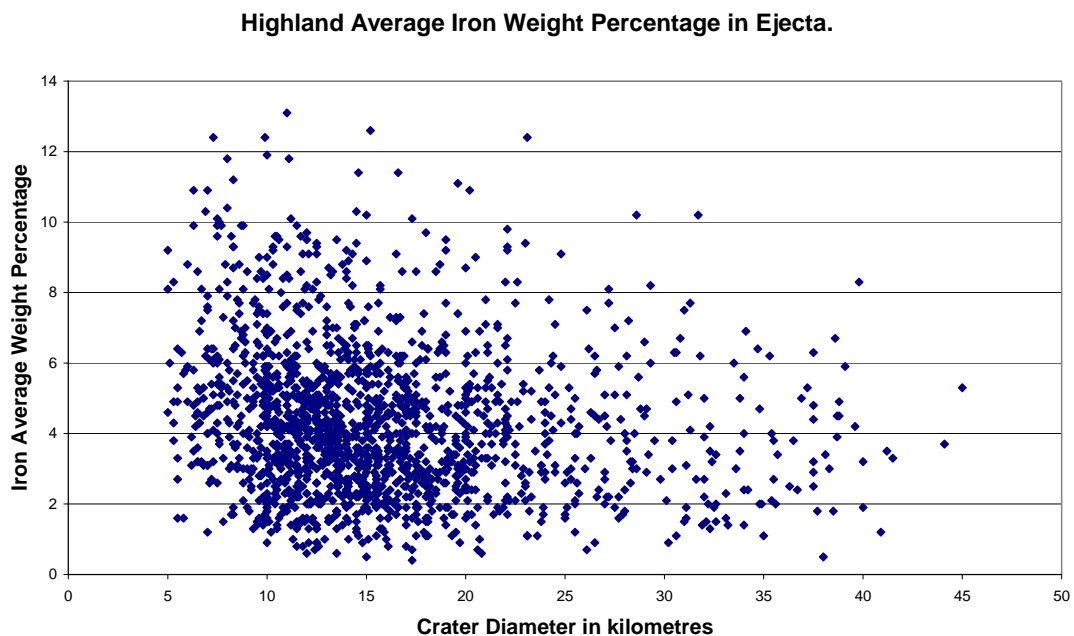


Figure 3-6 *Graph of Highland Average Iron Weight Percentage vs. Crater Diameter.*

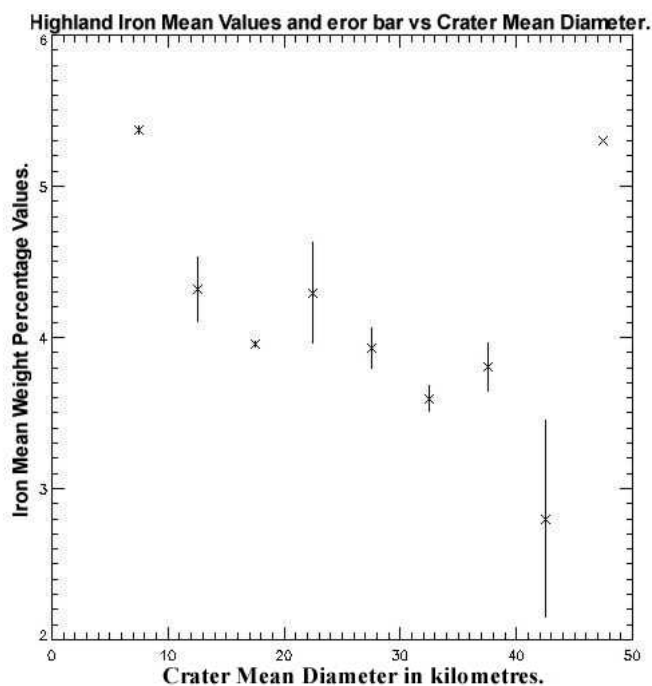


Figure 3-7 Plot of Highland Iron using one standard deviation (bars) relating to crater mean diameter at 5 kilometre intervals. The 45 km to 50 km bin relies on one crater; therefore, no standard deviation can be calculated.

Table 3-4 Average Highland Iron compared with mean crater diameter (5 km intervals).

Table of Highland Crater Ejecta Analysis for Iron.			
Crater count = 1650			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5 km	0	n/a	n/a
5 to 10 km	242	5.37	0.03
10 to 15 km	649	4.32	0.21
15 to 20 km	416	3.96	0.02
20 to 25 km	173	4.30	0.33
25 to 30 km	79	3.93	0.13
30 to 35 km	52	3.60	0.08
35 to 40 km	32	3.81	0.16
40 to 45 km	6	2.80	0.65
45 to 50 km	1	5.3	n/a

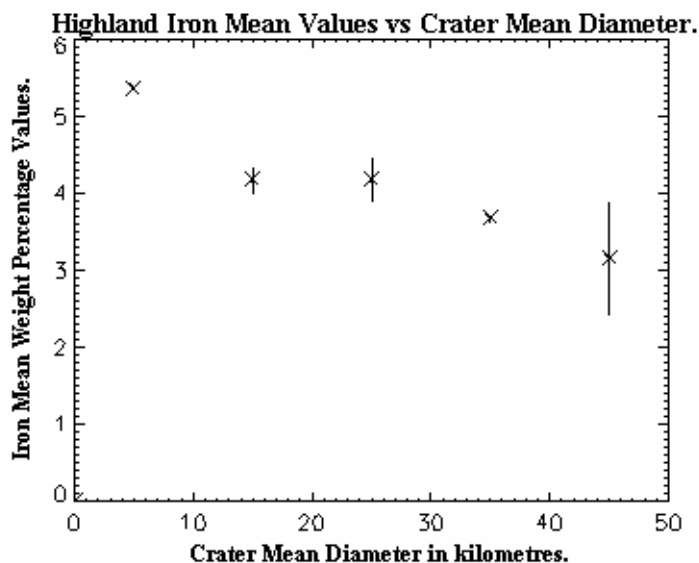


Figure 3-8 Plot of Highland Iron using one standard deviation (bars) relating to crater mean diameter at 10 kilometre intervals.

Table 3-5 Average Highland Iron compared with mean crater diameter (10 km intervals).

Table of Highland Crater Ejecta Analysis for Iron.			
Crater Count = 1650			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5-10 km	242	5.4	0.03
10-20 km	1065	4.2	0.2
20-30 km	252	4.1	0.3
30-40km	84	3.7	0.06
40-50 km	7	3.2	0.7

3.2.3 Mare Iron

As expected, the median iron values here are higher than in other areas because of the basalt flows that filled the basins to form the maria. Mare iron distribution values (Figure 3-9) show the iron values to be more scattered than in the highlands. Figure 3-9 is biased by the crater diameter population distribution. Mare terrane, because it has fewer craters, and especially very few larger craters, is interpreted as younger than highland terrane. As a consequence, mare terrane has 369 craters and so has fewer data points than highland terrane.

In Figures 3-10 and 3-11, for craters in the 5 to 30 km diameter range, there is a suggestion of a trend of decreasing iron values with increasing crater size, followed by an iron value increase for the craters larger than 30 km diameter. The larger craters excavate deeper (Grieve, 1981) and hence providing data that possibly extend into deep mafic crust. This trend of decreasing iron values to certain depths (and then perhaps increasing) may be explained as the iron content of different rock

layers at different depths. Crater-forming impactors penetrate mare material, through the anorthositic bedrock, and then into deep mafic crust. Hence a broad “U” shape is suggested in the plots Figures 3-10 and 3-11. Given the large error bars in Figure 3-10, this is more easily seen in Figure 3-11. Table 3-7, which relates to Figure 3-11, quantifies the observation relating the “U” shape in the plot more clearly than does Table 3-6 and Table 3-7 tend to support the concept of three rock layers of differing iron content. Tompkins and Pieters (1999) indicates a mostly mixed to anorthositic bedrock, and does seem to lend support for the existence of an iron-rich surface of basalt (~12 to ~19% FeO) over an lower-iron anorthositic(?) layer (~6 to ~12 % FeO) and a mafic (~12 to ~16% FeO) iron-rich layer. The maria data used in this study do not exceed the maria iron (FeO) value range from 17.7% for Apollo 12 samples to the highest 22% from the Apollo 15 samples (Taylor, 1982, pp 286-287). This work differs significantly from Tompkins and Pieters’ lunar bedrock study in that I am analysing the megaregolith in Highland areas, South Pole Aitken basin and maria (subsurface) that mostly overlays the bedrock (see Figure 1-9).

Table 3-6, relating to Figure 3-10, describes the total numbers of craters, mean diameters, and standard deviations for each set of grouped craters. It indicates that the majority of the 369 craters are in the smaller diameter range. These craters were from all maria combining both lunar nearside and farside populations.

Interestingly, the standard deviation for the 25 to 30 km crater diameter range (0.94) and the 30 to 35 km size range (3.35) and the 40 to 45 km size range may indicate that at those levels of excavation there was a significant variance in iron content in the ejecta. This may be further evidence or indication of anorthositic bedrock underlaying the basalt of the maria and for different thicknesses in the crust.

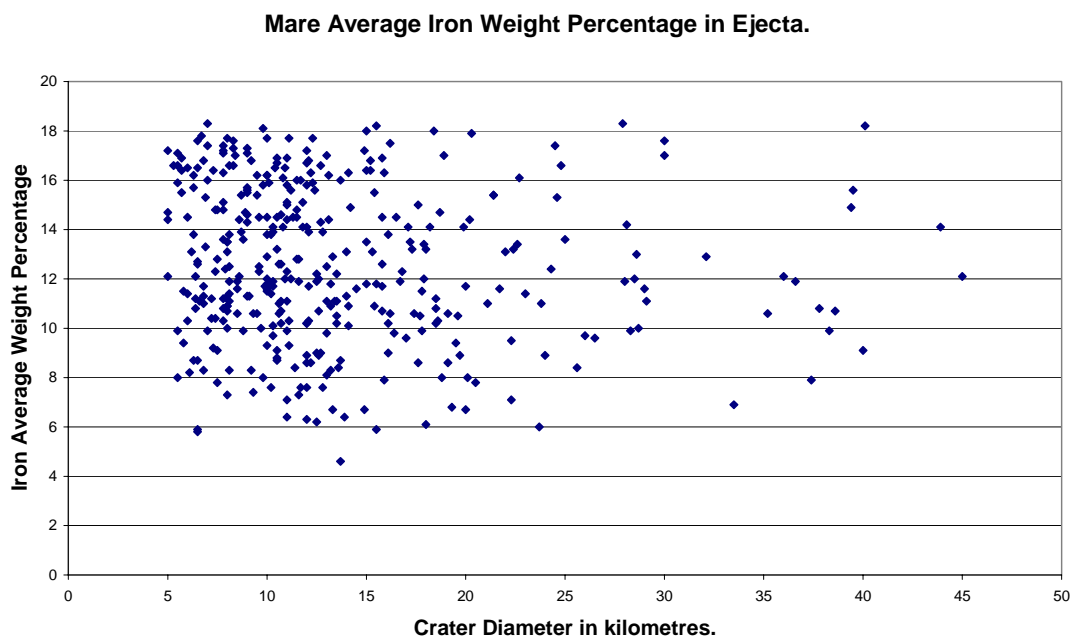


Figure 3-9 *Graph of Mare Average Iron Weight Percentage vs. Crater Diameter. This plot reveals the generally higher iron values expected for basaltic regions.*

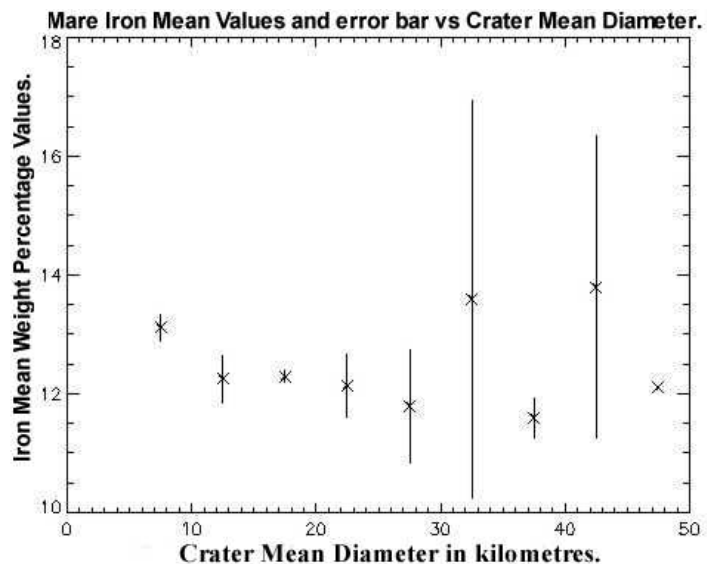


Figure 3-10 Plot of Mare Iron using one standard deviation (bars) relating to crater mean diameter at 5 kilometre intervals.

Table 3-6 Average Mare Iron compared with mean Crater Diameter(5 km intervals).

Table of Mare Crater Ejecta Analysis for Iron.			
Crater count = 369			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5 km	0	n/a	n/a
5 to 10 km	126	13.12	0.22
10 to 15 km	131	12.25	0.39
15 to 20 km	58	12.29	0.11
20 to 25 km	24	12.14	0.54
25 to 30 km	13	11.79	0.94
30 to 35 km	4	13.6	3.35
35 to 40 km	9	11.6	0.33
40 to 45 km	3	13.8	2.54
45 to 50 km	1	12.1	n/a

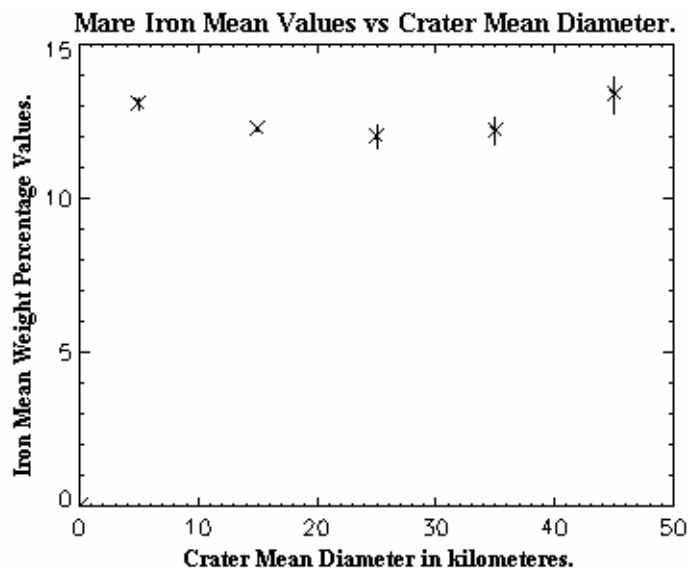


Figure 3-11 Plot of Mare Iron using one standard deviation (bars) relating to crater mean diameter at 10 kilometre intervals.

Table 3-7 Average Mare Iron compared with mean crater diameter (10 km intervals).

Table of Mare Crater Ejecta Analysis for Iron.			
Crater Count = 369			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5-10 km	126	13.1	0.2
10-20 km	189	12.3	0.06
20-30 km	37	12	0.4
30-40km	13	12.2	0.4
40-50 km	4	13.4	0.6

3.2.4 South Pole Aitken Basin Iron

South Pole Aitken (SPA) basin iron values (Figure 3-12) for 40 craters analysed show no apparent trend with depth. As shown in Figures 3-12, 3-13, and 3-14 and in Tables 3-8 and 3-9, the iron remains constant with depth to within the error bars. Hence, to within the measurement errors, iron appears to be of uniform concentration with depth in the South Pole Aitken basin.

The range of diameters from 5 to 25 km provides a maximum excavation depth of 2.5 kilometres (Croft, 1980; Grieve, 1981) and the iron values are consistent in the data set. The South Pole Aitken basin is a highly mafic region possibly exposing deep crustal or mantle material, according to Lucey et al., 1998A.

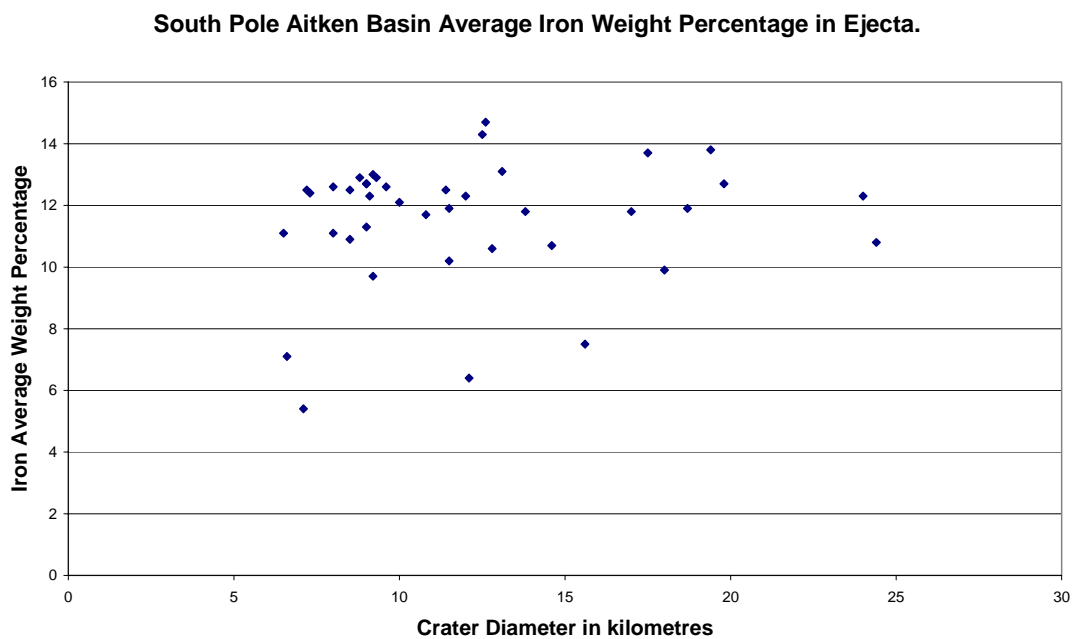


Figure 3-12 Graph of South Pole Aitken Average Iron Weight Percentage vs. Crater Diameter.

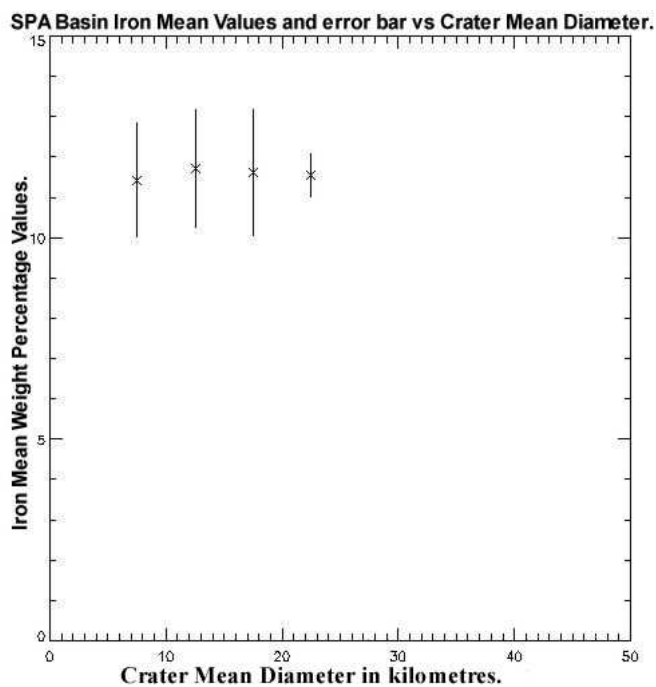


Figure 3-13 Plot of South Pole Aitken Basin Iron (with one standard deviation error bars) with 5 km increments in crater mean diameter.

Table 3-8 Average South Pole Aitken Basin Iron compared with mean crater diameter (5 km intervals).

Table of South Pole Aitken Basin Crater Ejecta Analysis for Iron.			
Crater count = 40			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5 km	0	n/a	n/a
5 to 10 km	18	11.43	1.42
10 to 15 km	13	11.72	1.47
15 to 20 km	7	11.61	1.56
20 to 25 km	2	11.55	0.53
25 to 30 km	0	n/a	n/a
30 to 35 km	0	n/a	n/a
35 to 40 km	0	n/a	n/a
40 to 45 km	0	n/a	n/a
45 to 50 km	0	n/a	n/a

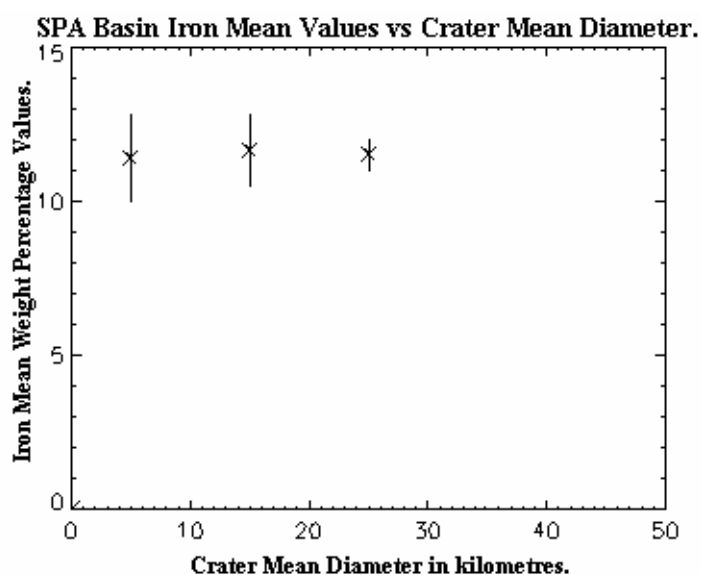


Figure 3-14 Plot of South Pole Aitken Basin Iron (with one standard deviation error bars) relating to crater mean diameter at 10 kilometre intervals.

Table 3-9 Average South Pole Aitken Basin Iron compared with mean crater diameter (10 km intervals).

Table of South Pole Aitken Basin Crater Ejecta Analysis for Iron.			
Crater Count = 40			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5-10 km	18	11.4	1.4
10-20 km	20	11.7	1.2
20-30 km	2	11.6	0.5
30-40km	0	n/a	n/a
40-50 km	0	n/a	n/a

3.2.5 Global Titanium

Although Global Titanium analysis combines three different terranes (Highland, Mare, and South Pole Aitken basin), the vertical (as opposed to lateral) distribution of titanium (TiO_2) in the megaregolith/subsurface on a global scale has never been investigated, and is thus studied here to see what trends or anomalies (if any) exist. The Global Average Titanium Weight Percentage values for all terrane types are seen in Figure 3-15. From this plot it can be seen that the majority of craters of all sizes have low titanium concentrations. In Figures 3-16, and 3-17, there is an initial steep decline in titanium values with depth (increasing crater diameter), and then a region of roughly constant values, and finally a sharp rise for the largest craters. The surprisingly high titanium for the largest craters is perhaps where impactors have excavated through the anorthositic crust into the lower crust, where pockets of titanium-rich material may be situated. An alternative explanation is that, in places, the titanium-rich basalt may be exceptionally thick (Jackson 2003B) and the impactors did not excavate deeply enough to expose the underlying anorthositic crust.

Although the data used to construct the plots include far-side Mare Moscoviense, the few craters in this region (< 6) do not appear to significantly bias the analysis. The vast majority of high titanium value data points are from the nearside maria.

Global titanium variations with crater diameter are as shown in Figures 3-15, 3-16, and 3-17 and Tables 3-11 and 3-12. These data represent the combined results from the Highland, Mare, and South Pole Aitken basin regions. It is evident from these figures, especially Figure 3-15, that titanium concentrations decrease with depth to a roughly constant value, before increasing at greater depth.

The mean weight percentages and titanium were found to decrease with depth in the highlands. In the mare areas, titanium did not display a statistically significant trend. In the more limited South Pole Aitken Basin dataset, titanium displayed an apparently uniform concentration to an approximate depth of 1.7 km and then a sharp decline to about 2.5 km.

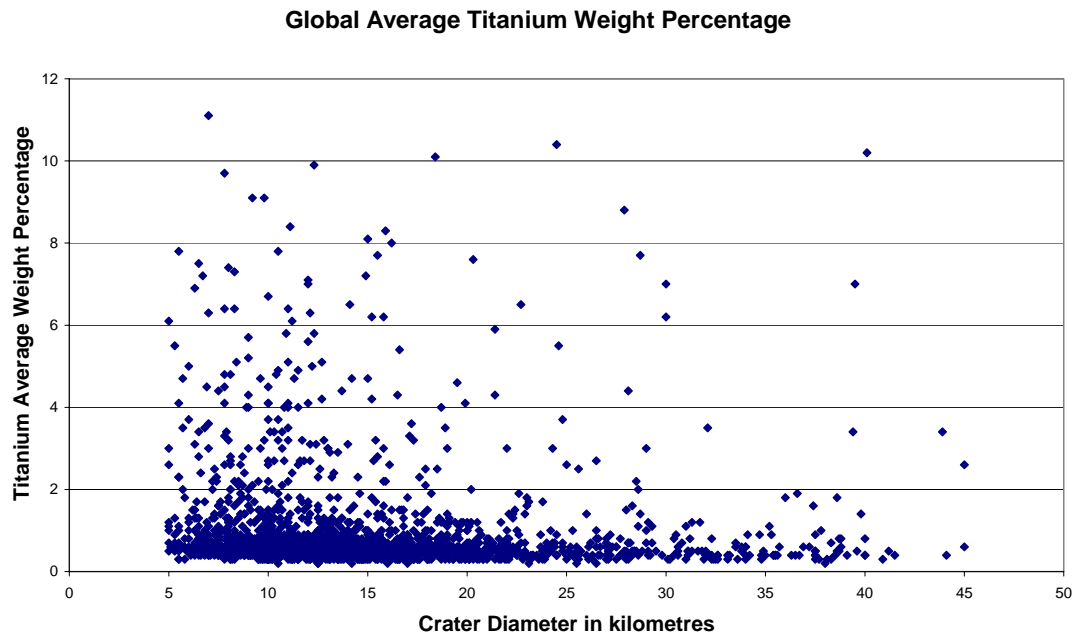


Figure 3-15 Graph of Global Average Titanium Weight Percentage vs. Crater Diameter.

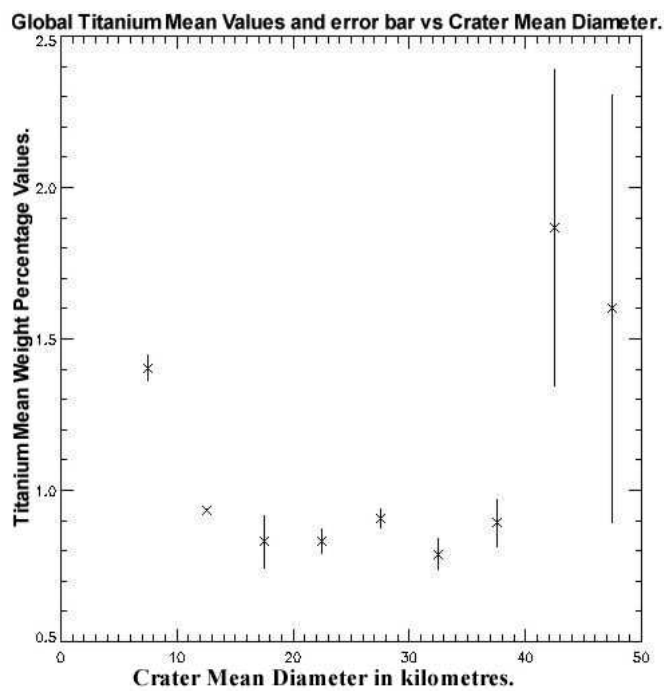


Figure 3-16 Plot of Global Titanium (with one standard deviation error bars) relating to increasing crater mean diameter of 5 kilometre increments.

Table 3-10 Average Global Titanium compared with mean crater diameter (5 km intervals).

Table of Lunar Global Crater Ejecta Analysis for Titanium.			
Crater count = 2059			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5 km	0	n/a	n/a
5 to 10 km	386	1.40	0.04
10 to 15 km	793	0.94	0.001
15 to 20 km	481	0.83	0.09
20 to 25 km	199	0.83	0.04
25 to 30 km	92	0.91	0.03
30 to 35 km	56	0.79	0.05
35 to 40 km	41	0.89	0.08
40 to 45 km	9	1.87	0.52
45 to 50 km	2	1.60	0.71

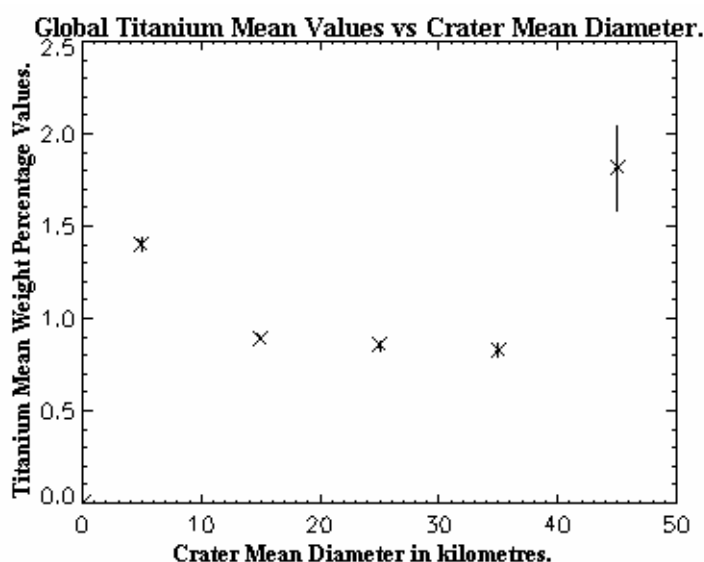
**Figure 3-17** Plot of Global Titanium (with one standard deviation error bars) relating to crater mean diameter at 10 kilometre increasing increments.**Table 3-11** Average Global Titanium compared with mean crater diameter (10 km intervals).

Table of Global Crater Ejecta Analysis for Titanium.			
Crater Count = 2059			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5-10 km	386	1.4	0.04
10-20 km	1274	0.9	0.0001
20-30 km	291	0.9	0.03
30-40km	97	0.8	0.04
40-50 km	11	1.8	0.3

3.2.6 Highland Titanium

In highland areas (Figure 3-18), there is a clustering of points at the lower range of titanium values, especially for smaller values. (The layered appearance of the plot is due to the large number of data points at similar small values; also see Table 3-12.) The low titanium results are as expected since the anorthositic highland material chemically does not usually contain titanium and most of the high values are found in titanium-rich mare basalts (Iaroshevskii et al., 1980). The titanium-rich basalts are the single most significant known source of titanium on the Moon (Taylor 1982). The exceptions are listed in the Table of Anomalies, Table 3-1, which shows craters that have high to moderately high titanium values in Highland areas. This is perhaps an indication of some intrusion by titanium-rich basalt. In Figures 3-19 and 3-20 a decline in titanium with crater diameter is evident. In addition, see Table 3-13 that is related to Figure 3-20. The low titanium values in these plots are as expected for Highland areas because the titanium is incompatible with the structure of anorthosite and therefore is excluded during the cooling stages of the anorthositic crust during the Moon's early history (Iaroshevskii et al., 1980).

Table 3-12 gives for a highland population of 1650 crater the mean crater diameters and mean titanium values with their standard deviation for each diameter range. This table provides a numerical equivalent to Figure 3-19.

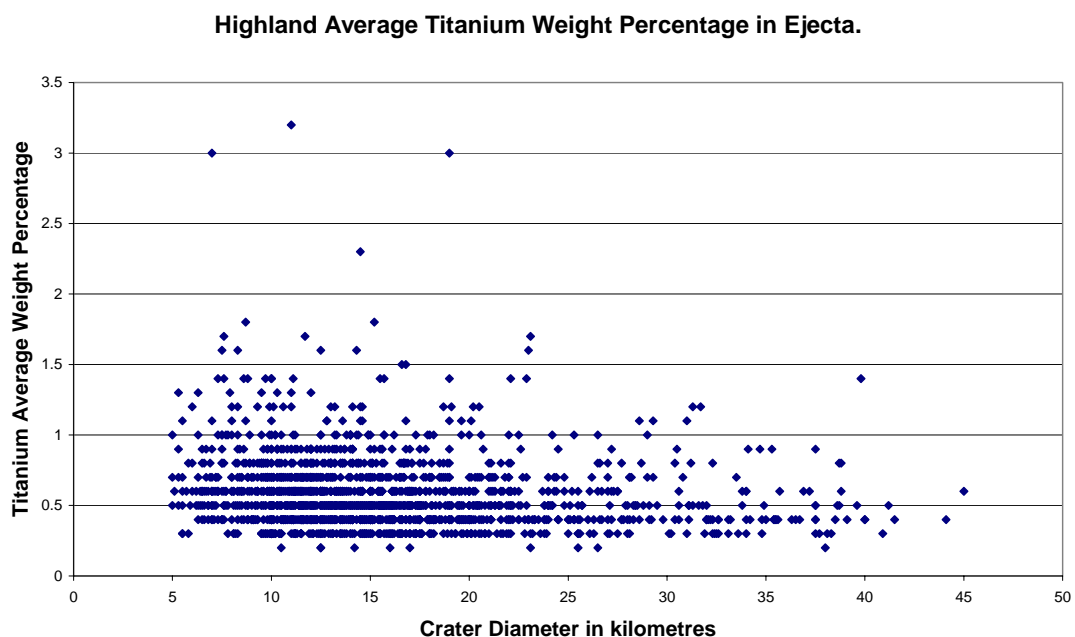


Figure 3-18 *Graph of Highland Average Titanium Weight Percentage vs. Crater Diameter.*

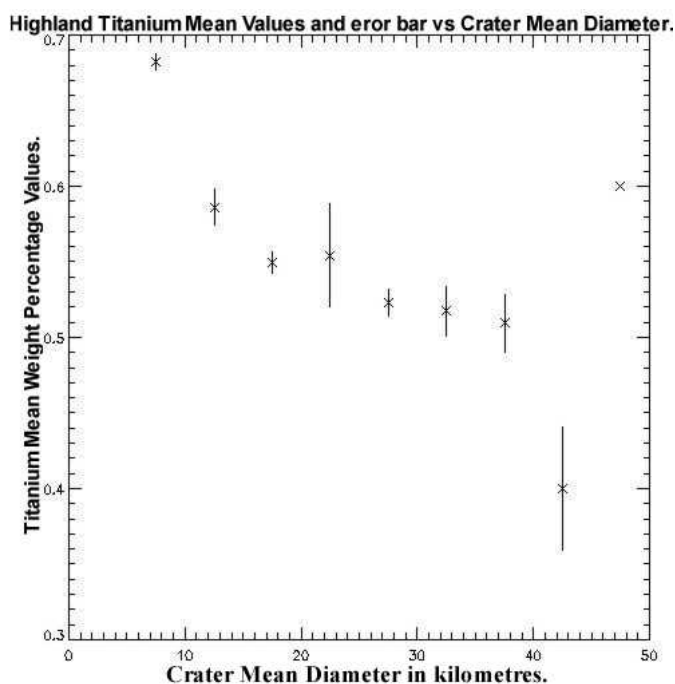


Figure 3-19 Plot of Highland Titanium (with one standard deviation error bars) relating to crater mean diameter at 5 kilometre intervals. The data point on the extreme right hand side is based on a single crater and hence no error bar can be given.

Table 3-12 Average Highland Titanium compared with Mean Crater Diameter (5 km intervals).

Table of Highland Crater Ejecta Analysis for Titanium.			
Crater count = 1650			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5 km	0	n/a	n/a
5 to 10 km	243	0.68	0.01
10 to 15 km	647	0.59	0.01
15 to 20 km	417	0.55	0.01
20 to 25 km	173	0.55	0.03
25 to 30 km	79	0.52	0.01
30 to 35 km	52	0.52	0.02
35 to 40 km	32	0.51	0.02
40 to 45 km	6	0.4	0.04
45 to 50 km	1	0.6	n/a

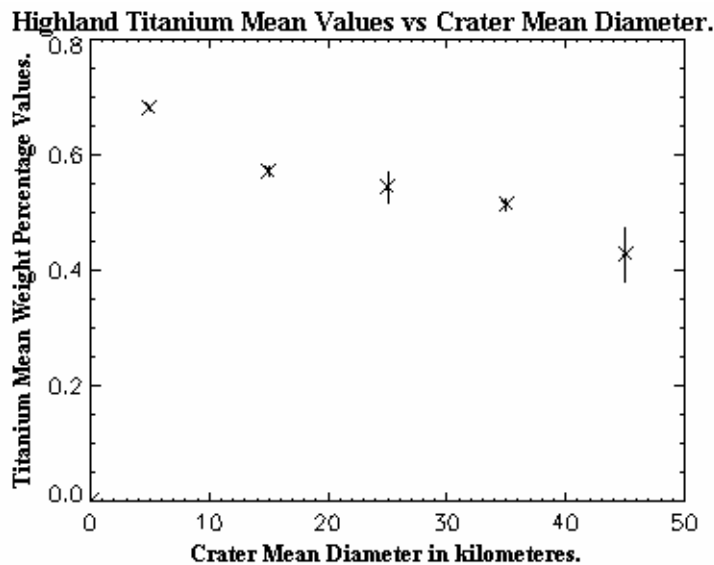


Figure 3-20 Plot of Highland Titanium (with one standard deviation error bars) relating to crater mean diameter at 10 kilometre intervals.

Table 3-13 Average Highland Titanium compared with mean crater diameter (10 km interval).

Table of Highland Crater Ejecta Analysis for Titanium.			
Crater Count = 1650			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5-10 km	242	0.7	0.005
10-20 km	1065	0.6	0.01
20-30 km	252	0.5	0.02
30-40km	84	0.5	0.1
40-50 km	7	0.4	0.5

3.2.7 Mare Titanium

In this category there are 2 distinct populations of maria that have coverages of either titanium-poor basalt flows or those of titanium-rich basalt flows

Because of the maria that are covered with titanium-poor basalt, the data (see Figure 3-21) are dominated by many small craters with relatively low titanium (TiO_2) values. Broadly, the titanium values are high, as expected, in areas where maria are covered with titanium-rich basalts.

In the maria the overall trend is one of a roughly constant titanium concentration of around 3 percent to a depth of about 3 km. This is shown by Figure 3-22 and Table 3-14. Due to the large error bars in Figure 3-22, the interpretation of titanium concentration to depths over 3 km is not clear. Nevertheless, when the data are re-binned to 10km crater diameter intervals, as shown in Figure 3-23 and Table 3-15, a rise in titanium concentration to more than 4 percent is indicated for depths greater than 3 km.

Not all maria are covered with titanium-rich basalts, as noted earlier. For example, the eastern part of Oceanus Procellarum is covered in titanium-poor basalt, which is overlaid by titanium-rich basalt. (Jackson 2001; Jackson, 2003 B). Therefore, craters excavating different depths may give rise to different titanium levels. Alternatively, it could be speculated that impactors may have excavated some craters near titanium-rich basalt outflows.

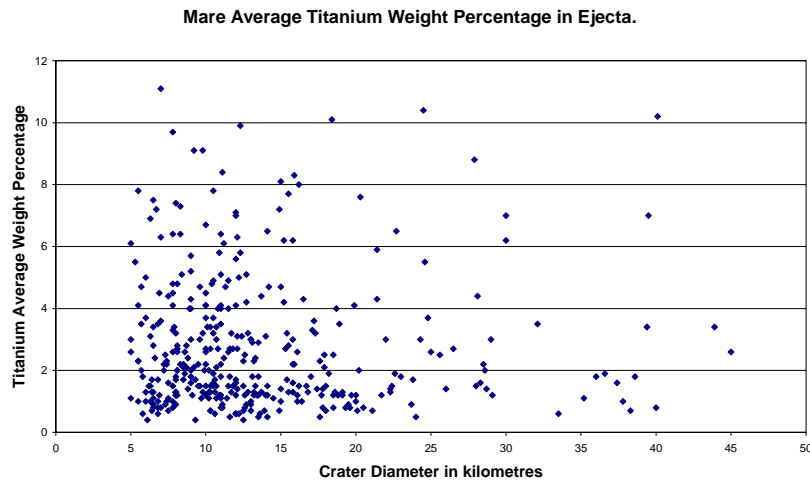


Figure 3-21 Graph of Mare Average Titanium Weight Percentage vs. Crater Diameter.

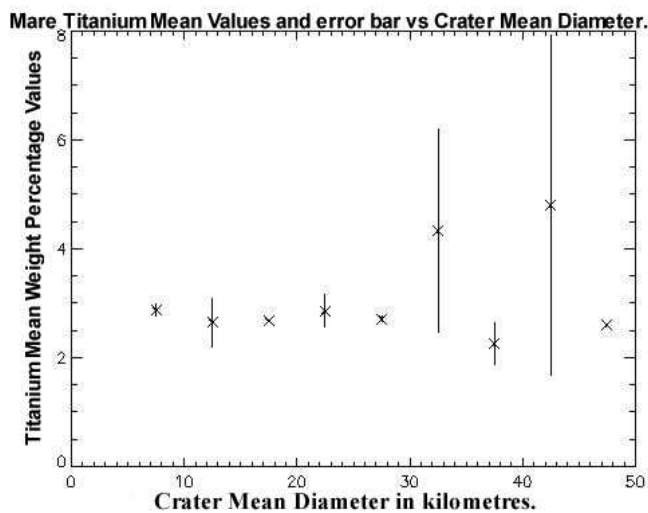


Figure 3-22 Plot of Mare Titanium using (with one standard deviation error bars) relating to increasing crater mean diameter of 5 kilometre increments. The 45 to 50 km point relies on a single crater for which no error bar can be given.

Table 3-14 *Mare Titanium compared with mean crater diameter (5 km intervals).*

Table of Mare Crater Ejecta Analysis for Titanium.				
Crater count =		369		
Crater Size Range	Number of Craters	Average Weight percentage	Standard Deviation	
< 5 km	0	n/a	n/a	
5 to 10 km	125	2.87	0.11	
10 to 15 km	132	2.65	0.45	
15 to 20 km	58	2.68	0.002	
20 to 25 km	24	2.85	0.30	
25 to 30 km	13	2.72	0.06	
30 to 35 km	4	4.33	1.86	
35 to 40 km	9	2.26	0.39	
40 to 45 km	3	4.80	3.12	
45 to 50 km	1	2.60	n/a	

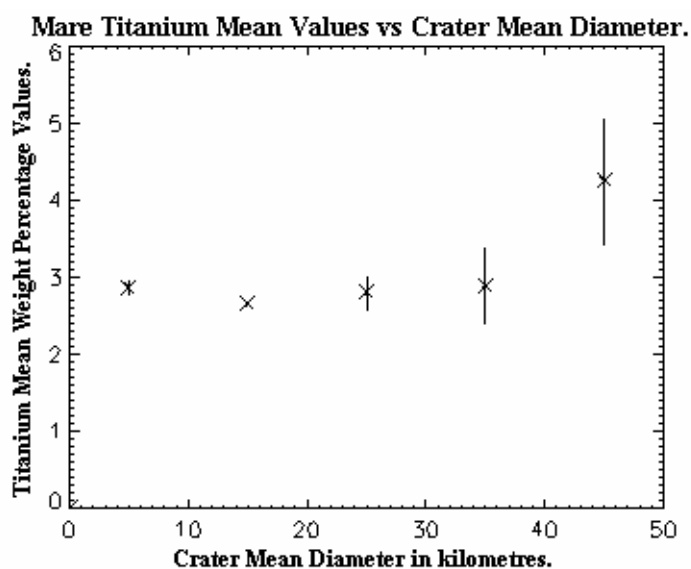
**Figure 3-23** *Plot of Mare Titanium (with one standard deviation error bars) for crater mean diameter increasing by 10 kilometre increments.***Table 3-15** *Average Mare Titanium compared with mean crater diameter (10 km intervals).*

Table of Mare Crater Ejecta Analysis for Titanium.			
Crater Count =		369	
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5-10 km	126	2.9	0.1
10-20 km	189	2.7	0.003
20-30 km	37	2.8	0.2
30-40km	13	2.9	0.5
40-50 km	4	4.3	0.8

3.2.8 South Pole Aitken Basin Titanium

Figure 3-24 displays a spread of titanium values for the 40 craters in this population. This suggests that the titanium values in this region remain fairly constant to about 1.7 km depth, and then decreasing to about 2.5km. However, Pieters et al. (2001) describes the existence of some titanium-rich basalt flows in the northern part of the South Pole Aitken basin; therefore, higher titanium values could be expected in those areas. As is apparent from Lucey et al. (1998) and Pieters et al. (2001), and Figure 3-2 in this thesis, these titanium-rich basalts seem to be mostly stretch in a north-westerly to north-easterly arc, just inside the edge of the basin.

Figures 3-25, and 3-26 and Tables 3-16 and 3-17 indicate a decline in titanium values with increasing depth for the deepest measurable craters. The data in this study indicate that the highest value of titanium is just under 2.5 percent, and therefore could be interpreted as titanium-rich material in this northerly arc, mixed with underlying titanium-poor material of predominantly deep crust origin (Pieters et al. 2001). Alternatively, the data indicate that the basalt may simply have contained less titanium than other titanium-rich basalts found elsewhere on the Moon. Luna 24 sample data analysed amount of TiO_2 of 0.98% with Apollo data going as high as 13 % for Apollo 17. Although the Luna and Apollo data (Taylor, 1982, pp 286-287) are not from the South Pole Aitken basin it does provide an interesting comparison with other areas of the Moon. The result for this region of a maximum of 2% TiO_2 is not outside the range of known values for other parts of the Moon (Taylor, 1982, pp 286-287). The Apollo 15 samples having a 2.28% TiO_2 are the closest to the results of this study (Taylor, 1982, pp 286-287). Basalt sources are spatially separate partial melt zones within the mantle (see Figure 1-2) and the geochemical composition of the basalts may vary as the composition of source material may vary from place to place (Taylor, 2001).

The variation in titanium from place to place arises because the excavation of the South Pole Aitken basin has exposed very deep crust (Lucey et al., 1998A, 1998 B), and so titanium-rich basalt has flowed over what is interpreted from Figures 3-1 and 3-2 as a titanium-poor mafic surface.

Although the size of the South Pole Aitken sample is small and does restrict interpretation, it is large enough to suggest a decrease in titanium concentration at depth.

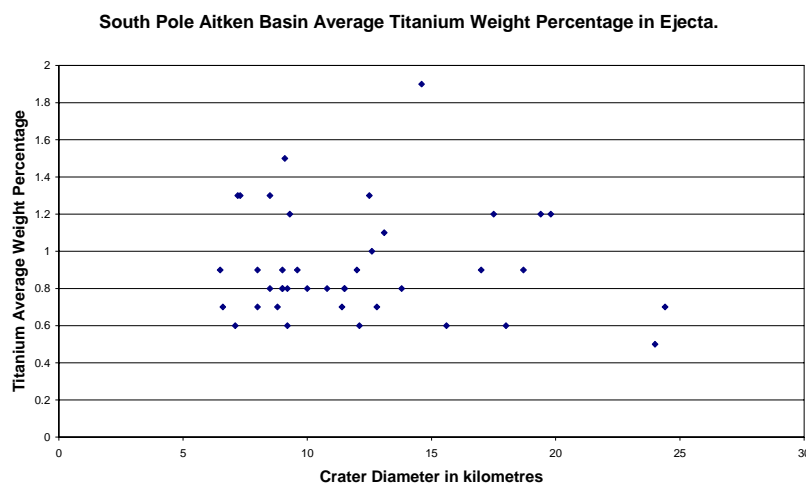


Figure 3-24 Graph of South Pole Aitken Basin Average Titanium Weight Percentage vs. Crater Diameter.

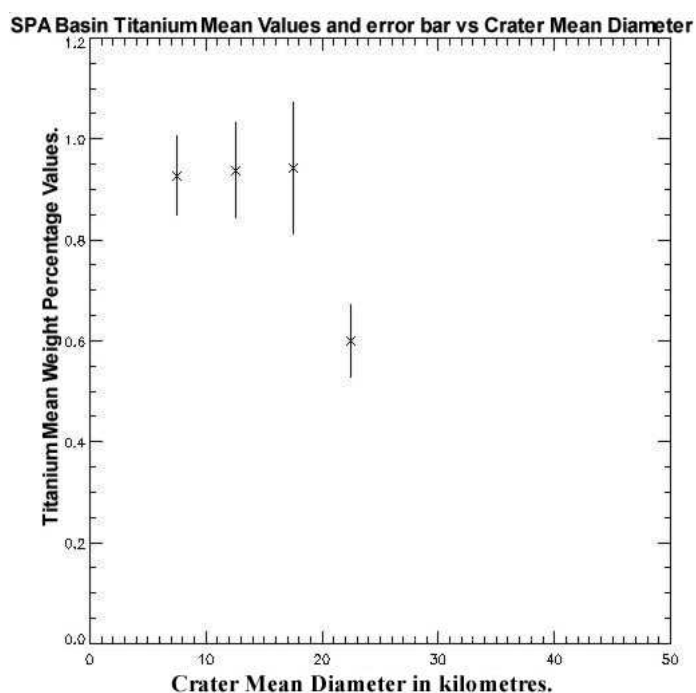


Figure 3-25 Plot of South Pole Aitken Basin Titanium (with one standard deviation error bars) ejecta for increasing crater mean diameter in 5 kilometre increments.

Table 3-16 South Pole Aitken Basin Titanium for different mean crater diameter (5 km intervals).

Table of South Pole Aitken Basin Crater Ejecta Analysis for Titanium.			
Crater count = 40			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5 km	0	n/a	n/a
5 to 10 km	18	0.93	0.08
10 to 15 km	13	0.94	0.09
15 to 20 km	7	0.94	0.13
20 to 25 km	2	0.60	0.07
25 to 30 km	0	n/a	n/a
30 to 35 km	0	n/a	n/a
35 to 40 km	0	n/a	n/a
40 to 45 km	0	n/a	n/a
45 to 50 km	0	n/a	n/a

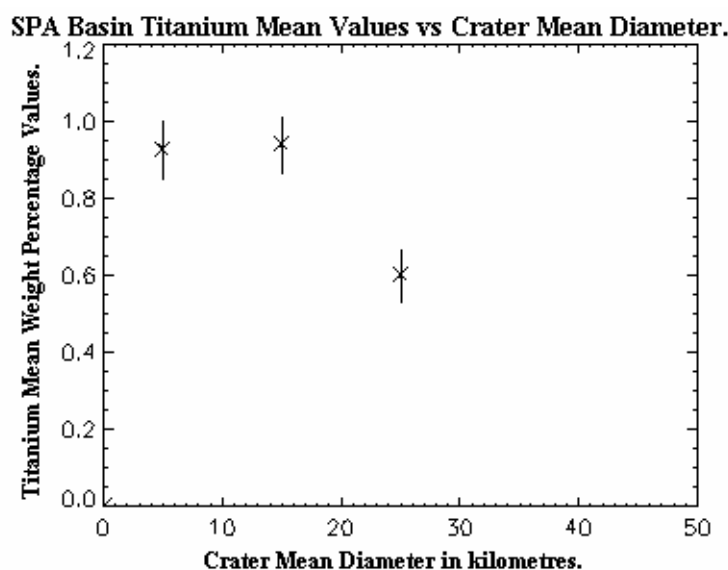


Figure 3-26 Plot of South Pole Aitken Basin Titanium (with one standard deviation error bars) relating to crater mean diameter, in increments of 10 kilometres.

Table 3-17 Average South Pole Aitken Basin Titanium compared with mean crater diameter (10 km interval).

Table of South Pole Aitken Basin Crater Ejecta Analysis for Titanium.			
Crater Count = 40			
Crater Size Range	Number of Craters	Average Weight Percentage	Standard Deviation
< 5-10 km	18	0.9	0.08
10-20 km	20	0.94	0.08
20-30 km	2	0.6	0.07
30-40km	0	n/a	n/a
40-50 km	0	n/a	n/a

3.3 New Lunar Megaregolith Province Maps

Two new Lunar Province Maps (Figures 3-27 and 3-29) were produced from the Iron and Titanium Distribution Maps (Figure 3-1, Iron (FeO); and Figure 3-2, Titanium (TiO₂)) in the megaregolith. This study uses iron and titanium crater ejecta data for 2059 craters. Kriging² (Davis, 1986, pp 383-405) is used to interpolate values between the data points and then project these values onto a global map

² “Kriging is a concept of regionalised variable... as a naturally occurring property that has characteristics intermediate between a truly random variable and one that is completely deterministic.”

“The estimating procedure is called ‘kriging’.”, Davis (1986). Essentially, kriging estimates the values between known data value points for various geological features, in this instance, iron (FeO) and titanium (TiO₂) for the purposes of mapping.

between 60⁰N and 60⁰S in the “D North American 1927 GCS Assumed Geographic” mapping projection on a spherical form using ESRI ArcGIS 8.3 software (www.esri.com). The different groups of values were contoured as polygons in a Geographic Information System. The Geographic Information System software is capable of dividing the data into any number of groups or classes to provide Provinces required for this study. Thus, an experiment was undertaken dividing the data into different numbers of groups or classes to determine the best results. The use of 5 groupings or classes (Provinces) was found to be the optimum to provide the detail and clarity for maps required for this thesis.

3.3.1 The Lunar Iron Province Map

The ArcGIS 8.3 software was directed, without bias, to divide the subsurface data derived from crater ejecta into 5 Lunar Iron (FeO) Provinces.

- i) Lunar Highlands I - low iron content (0.0 to 3.7 %)
- ii) Lunar Highlands II – low-medium iron content (3.8 to 6.4 %)
- iii) Lunar Mare I or South Pole Aitken I – medium iron content (6.5 to 9.7 %)
- iv) Lunar Mare II - South Pole Aitken II – medium-high iron content (9.8 to 13.6 %)
- v) Lunar Mare III - South Pole Aitken III – high iron content (13.7 to 18.3 %)

The maria areas and South Pole Aitken basin have been allocated equivalent provinces for simplicity.

This enables the iron-poor megaregolith of the Highland region to display the area of low Iron Province Highland I and low-medium Iron Province Highland II that will be discussed in Chapter 4. The remaining provinces relate to the maria and South Pole Aitken basin and are labelled with increasing iron values, namely Iron Province Mare I/ South Pole Aitken I, Iron Province Mare II/ South Pole Aitken II, Iron Province Mare III/South Pole Aitken III.

With the exception of Highland II Province, the medium-high, high and very high iron provinces coincide with the maria and South Pole Aitken basin. It is interesting to note that the megaregolith under Mare Moscoviense and especially Orientale do not display the higher mare iron intensities in the megaregolith province maps, although several higher values may be seen in Figure 3-1. In contrast, the megaregolith of the South Pole Aitken basin displays a complex signature of up to 13.6 percent iron values. A few isolated points in Figure 3-1 show an iron concentration of up to 18.1%; however, these are averaged out by the nearest neighbour kriging calculations used to produce the new Iron Province Map of Figure 3-27.

For ease of interpretation, the mapping scale for all maps produced for this thesis is approximately 1:86,000,000 in both latitude and longitude. This scale was derived by using US Geological Survey 1:5,000,000 lunar maps (Weir 1990). The scale was calculated using the relationship that Scale equals Distance on the New Map at the equator in this instance divided by the Distance on the USGS Maps and multiplied by the USGS Map Scale. In the USGS maps, a Conical Mercator or Polar Mercator projection is used and the scale varies from an equatorial 1:6,036,000 scale (approximately) to one of 1:5,000,000 at latitudes 34 degrees N-S (Weir, 1990). To expedite interpretation of the maps produced in this study, a bar scale has been provided to estimate approximate distances.

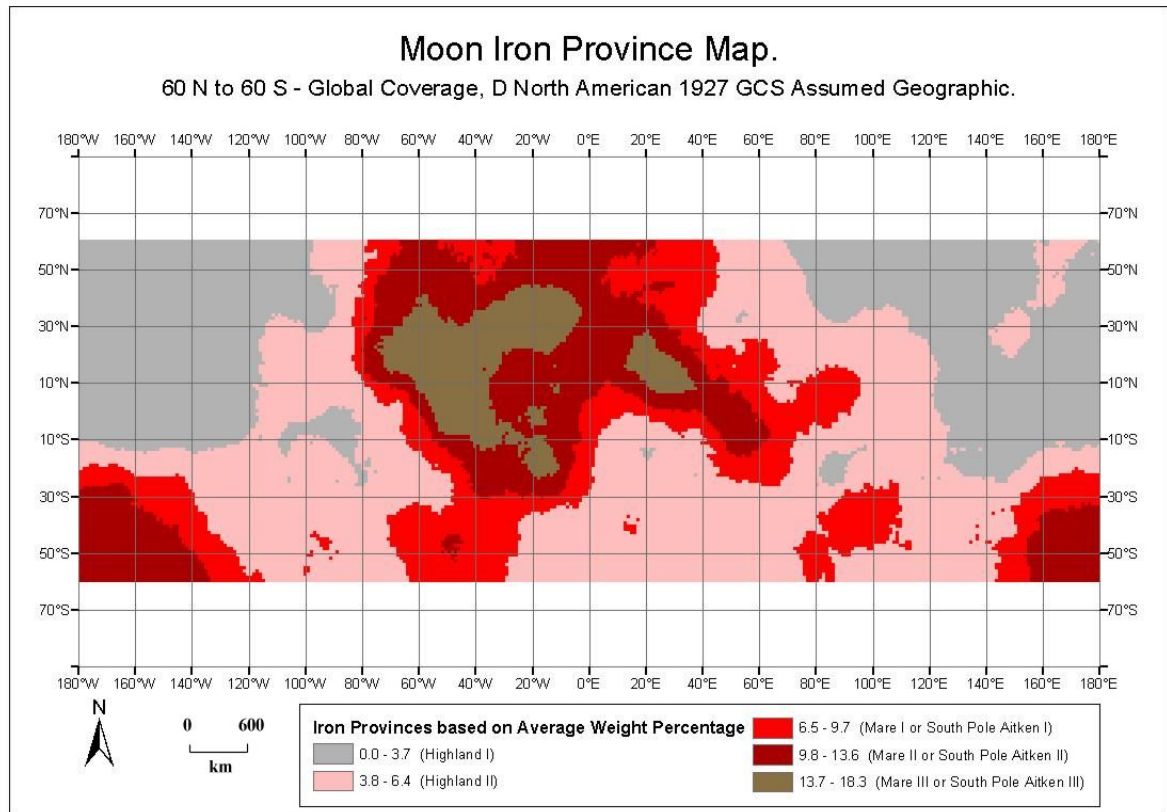


Figure3-27 Moon (Megaregolith /Subsurface) Iron Province Map (approximate scale 1:86,000,000), derived by interpolation of the Iron Weight Distribution Map (Figure 3-1). The interpolation takes values of surrounding pixels and derived a value for areas of no data using kriging (Davis 1986) and calculates a value in this case to a spherical surface. Kriging for maps for areas between data points is an often used statistical estimation technique for geological mapping (Davis 1986). The resultant province map can be compared with the Iron Distribution Map data in Figure 3-1. (This Iron Megaregolith Map is the most recent version of that published in the preliminary report by Spudis et al., 2004, in that some revised values have been used in this newer version).

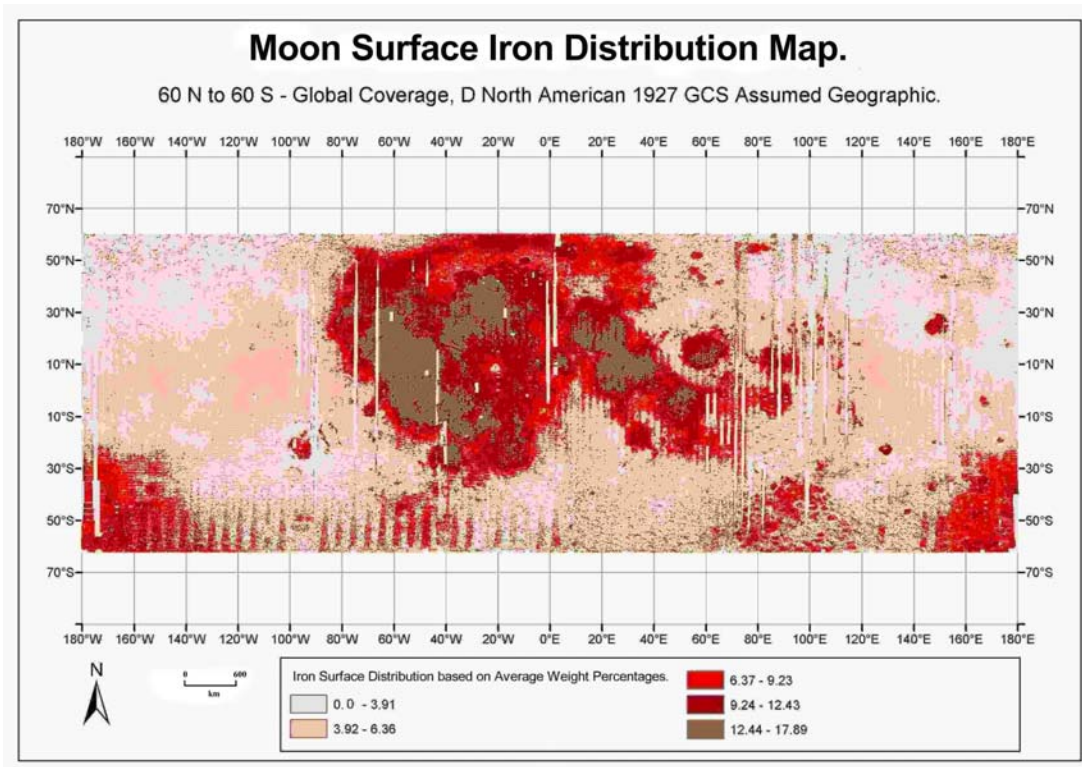


Figure3-28 *Moon Surface Iron Distribution Map* adapted from Spudis et al. (2004). This map represents the iron distribution on the surface. The pink flush over anorthosite Highland regions is because of the iron in ejecta from cratering events. Although the weight percentages on this surface map are not exactly the same as the megaregolith map, the values are sufficiently close to provide a clear indication of the differences and similarities of the surface and subsurface in terms of iron distribution.

Figure 3-28 is a lunar surface iron distribution map (adapted from Spudis et al. 2004). This map provides a comparison between the surface iron distribution and that in the megaregolith (subsurface). Some interesting comparisons may be seen and this will be discussed in Chapter 4.

3.3.2 The Lunar Titanium Province Map

The global lunar titanium (TiO_2) map is divided into 5 provinces through divisions into 5 classes of titanium weight percentage average values (see Figure 3-2). This procedure is consistent with the methodology used for iron (FeO).

The 5 Lunar Titanium (TiO_2) Provinces are listed below:

- i) Titanium I - very low titanium (0.0 percent to 1.0 percent)
- ii) Titanium II - low titanium (1.1 percent to 2.5 percent)
- iii) Titanium III – medium titanium (2.6 percent to 4.9 percent)
- iv) Titanium IV – high titanium (5.0 percent to 7.8 percent)
- v) Titanium V – very high titanium (7.9 percent to 11.1 percent)

Most maria seem to be represented (even if only in part) in the Titanium Province Map. However, the South Pole Aitken basin has only a weak signature (up to 2.5 percent), mostly on the northern margins of the basin, and with a distribution that only partly covers the area of the iron distribution. In these areas of mixed titanium and iron signatures, these would most likely indicate titanium-rich basalts. However,

as no physical samples were obtained from the South Pole Aitken basin during the Apollo program, it is not possible to verify this data further with geochemical evidence. In addition, around the approximate centre of Orientale, there is an oval of Titanium Province II material.

Province Titanium I (0.0 percent to 1.0 percent) mostly covers the Highland and some western mare areas, whereas Province Titanium II (1.1 percent to 2.5 percent) covers maria areas at the lowest intensity. Province Titanium III (2.6 percent to 4.9 percent), Province Titanium IV (5.0 percent to 7.8 percent) and Province Titanium V (7.9 percent to 11.1 percent), as expected, all cover titanium-rich mare areas. The largest coverage and highest concentrations of titanium appear in a part of Oceanus Procellarum centred on approximately 15N, 55E. In Mare Tranquillitatis, two smaller anomalous areas of iron and titanium points of higher values can be easily seen in Figures 3-1 and 3-2.

In the final maps, interpolation (kriging) has averaged out isolated outlier values. This is particularly so for Mare Moscoviense and Orientale. In the new lunar megaregolith Titanium Province Map (Figure 3-29) a kriging calculation of “nearest neighbour” values has been used to interpolate the data and average out the two higher values for Mare Moscoviense and the three higher values for Orientale. The small number of data points available in these two areas provides the best available result at this time.

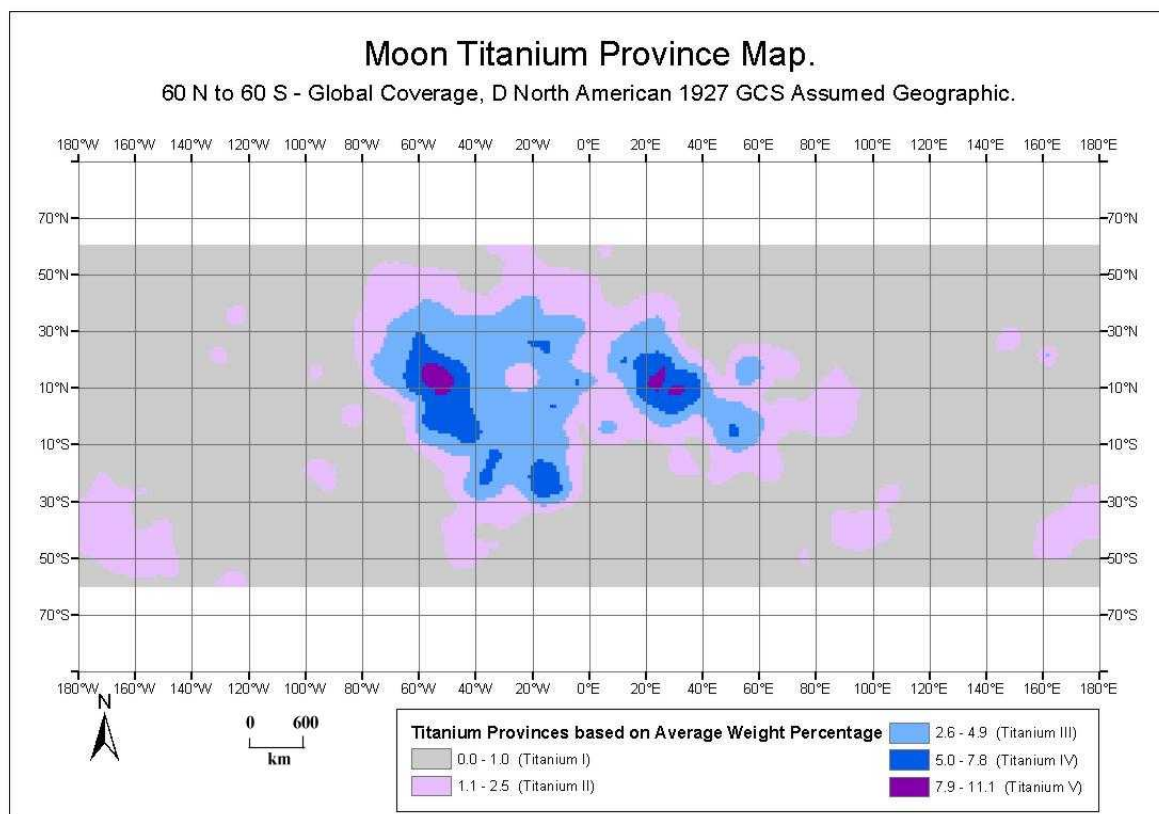


Figure3-29 *The Lunar Megaregolith/ Subsurface Titanium Province Map was derived by the interpolation of the Titanium Weight Percentage Distribution Map (Figure 3-2). The interpolation takes the values of surrounding pixels and derives a value for areas of no data using kriging (Davis, 1986).*

4 DISCUSSION

4.1 *Interpretation of the mapping results*

This chapter discusses how the iron and titanium maps may be interpreted in terms of geological processes in the megaregolith.

4.2 *Comparison of the new Iron and Titanium megaregolith Province Maps with the bedrock map of Tompkins and Pieters (1999)*

Using Clementine data, Tompkins and Pieters (1999) analysed the basement rock (see Figures 1-9 and 4-1) by an analysis of central peak lithologies for 109 craters – the majority of which are 40 - 150 km in diameter. This allowed penetration to bedrock (Tompkins and Pieters 1999) and therefore spectral analysis of these central peaks in the 1994 Clementine mission data provides a geochemical signature for the bedrock.

Comparison of the Tompkins and Pieters' map (Figure 4-1) with the new Iron Province Map (Figure 3-27) suggests a number of similarities and differences. Tompkins and Pieters (1999) state that almost half of the peaks are mostly anorthositic in composition. In the Highland Province I areas the basement is iron-poor anorthosite/ anorthositic and therefore as expected. The Highland II Province (low-medium iron content) of Figure 3-27 does not agree entirely with the basement rock analysis. The predominantly anorthosite bedrock readings from the Tompkins and Pieters (1999) map (Figure 4-1) imply that the Highland II megaregolith iron values in these areas is not derived only from the bedrock. If the underlying strata mostly have lower iron than overlying strata, the source of material could not have been derived only from lower strata. Thus based on the Tompkins and Pieters map, the bedrock seems likely to be the source of the anorthosite/ anorthositic part of Highland II which contains little or no iron (Taylor, 1982, p 209.). Therefore, Highland II iron must be derived from another source.

The enhanced iron levels in the Highland II Province, when compared to Highland I, perhaps result from deposits of basin ejecta, as proposed by Haskin (1998). Another model is the "Thrust Block" model, where a basin's formation causes the mafic layers underneath the anorthosite bedrock to fault into blocks that are then thrust up through the bedrock into the anorthosite megaregolith and somehow the two mix to form the Highland II material. Alternatively, however, one may propose a model of basalt or mafic intrusion, in the form of sills and dykes that occur because of basin or mare formation. The basin formation fractures the surrounding crust and allows basalt or mafic magma to intrude the anorthosite/ anorthositic megaregolith. Ryder and Wood (1977) devised a "Norite" model based on Apollo samples from Serenitatis and Imbrium basins. This Norite model devised a 3 layer approach of a surface anorthositic material, underlain by low-potassium Fra Mauro basalts and that in turn is underlain by mafic material. If this is so, then it can be used to infer that the "Block Thrust" model is less likely, but does not seriously contradict the Intrusion or Ejecta models. However, it should be noted that this Norite model, though based on Apollo samples, the source data are only from

two sites; whereas the data for this thesis are based on established techniques (Harrison and Jupp 1989; Hapke, 1993; Nozette et al., 1994; McEwen et al., 1994; Pieters et al. 1994; Eliason et al. 1999; and Lucey et al., 2000) on a global scale. While there may be other explanations, this intrusion scenario for the source of the iron of the Highland II Province seems the most likely. The basin-forming events have been of such magnitude as to fracture the surrounding anorthositic crust (this includes the bedrock), allowing mafic magma forming sills and dykes to intrude the crust, with subsequent excavation by impacts. Hartmann (1973) described the megaregolith as a “breccia” and not coherent crystalline rock; as such, voids or spaces would be expected in between larger anorthositic rock particles, while the shattering basin-forming events could have opened more voids and pathways. Therefore, it can be speculated that these pathways allowed the intrusion of basalt or mafic magma into the megaregolith, but not necessarily reaching the surface. Basalt volcanism is mostly restricted to the lunar near side where the crust is thinner (Ryder and Wood, 1977). In this Intrusion model, the result is that the pre-existing anorthositic material and the basalt or mafic magma of sills and dykes are mixed by subsequent cratering to produce the Highland II Province in the megaregolith. A variation of this Intrusion model is that the basalt intruded from the freshly formed maria to produce sills and dykes. As basalt flowed into basin areas in succession, such as described by Burroughs and Spudis, 2001; then the maria basalts may have had insufficient time to intrude the megaregolith to form the megaregolith Highland Province II. It does appear that the first version of the Intrusion model forming the Highland Province II is the more supportable with the available evidence.

Table 3-1 provides some supporting evidence for the above “Intrusion” model. For example, Crater 846 (15.6 N, 96.2 W) is in a small basaltic area (bright in both Clementine iron (FeO) and titanium (TiO₂) images) on the surface surrounded by Highland Terrane. This area is over the subsurface Highland II. If this was as a result of basin ejecta alone over this highland area, the enhanced iron values distribution would be expected to be more widespread. The surface crater density over lower iron Highland I megaregolith is similar to that of the surface over Highland II megaregolith. Therefore, it could be argued that they are of about the same age.

The question remains as to the source of the low-medium iron content in the Highland II megaregolith. A proposed basaltic/ mafic magma intrusion model to explain this is reasonable in that Crater 846 sits as an “island” of higher iron and titanium surrounded by low iron and very low titanium Highland terrane. While this particular example and others in Table 3-1 provide similar evidence to support the “Intrusion” model, the basin ejecta blanket model by Haskin and others cannot be discounted entirely. The Iron Province Map (Figure 3-27) indicates a crude “bullseye” pattern of decreasing iron values that show the spread of iron values immediately around the basins and maria. It is conceivable that some basin ejecta did cover highland craters that are immediately adjacent to these structures. The proposed “Intrusion” model would not necessarily cause all megaregolith on the Moon to have higher iron content. Fissures, cracks and volumes of connecting void spaces, plus the volume and fluidity of available basaltic or mafic magmas would constrain the extent of the formation of Highland II material.

It is interesting to note that Orientale megaregolith is almost entirely in the zone of Highland II except for one or two points (see Figures 3-1 and 3-2). This may indicate that the megaregolith is mostly of anorthosite and that the basaltic covering is relatively thin and implies that the anorthositic crust is considerably thicker

around Orientale. This interpretation would basically agree with the work of Tompkins and Pieters (1999), which indicates bedrock containing a mixture of anorthositic norite, GNTA (gabbro, norite, troctolite, and anorthosite) and anorthositic gabbro. Therefore, the most obvious source of Orientale megaregolith would be Orientale ejecta. The older, far-side Mare Moscoviense seems to give similar megaregolith results to Orientale. The two higher values for Orientale and three for Mare Moscoviense can more easily be seen in Figures 3-1 and 3-2.

Mare areas are younger than the highland areas and therefore have fewer craters and data points for analysis. However, the population of 369 mare craters provides a substantial dataset for this present study.

The mare surface materials of varying depth (Burroughs and Spudis, 2001; Jackson, 2001; Jackson, 2003B) that constitute Oceanus Procellarum and other neighbouring maria are of titanium-poor and titanium-rich basalts (Jolliff et al., 2000). The bedrock seems to be mostly anorthosite or an anorthositic (low iron) mixture, and in some places appears to be more mafic (high iron) in content (Figure 4-1, Tompkins and Pieters 1999). Some of the discrete basalt outflows may exist in the vicinities of places where central peaks consist of mafic or predominately mafic material. In the case of deep maria regions it may not be correct to refer to the subsurface as “megaregolith” but simply as the “subsurface”. If, as suggested by the work of Tompkins and Pieters (1999), the bedrock is not predominately mafic in the maria, this would indicate that, in most cases, the bedrock is not the source of the subsurface “megaregolith”. This suggests that for the majority of maria, over geological time, the basalt flowed out from discrete fissures and flowed over the bedrock into excavated areas of lower elevation.

4.3 Comparison of the megaregolith map with ejecta from Mare Orientale, Mare Imbrium, and Mare Nectaris that show deep crust (Spudis, 1993)

Basin ejecta for the Imbrium basin and the Nectaris basin seem to be confined to their general vicinity, with high iron values that indicate a deep crustal origin. However, as indicated earlier, this study puts some constraints on the extent of basin impact ejecta contributing iron to the surrounding areas, particularly in relation to the Highland II Province classification. The ejecta of both basins might possibly have contributed to some limited extent to the Highland II Province, but this contribution is by no means certain, as the data do not provide strong evidence on a broad scale.

Mare Imbrium itself has been classified Mare III; however in terms of Mare I and Mare II Provinces that surround Imbrium like quasi concentric rings, it is likely that basin ejecta coupled with basalt mixing provides the source of the high iron values in the megaregolith. Based on the high iron values, Imbrium Mare III is probably related to deeper crustal material. However, while basin formation ejecta no doubt contributed in some degree to the megaregolith in the regions surrounding the maria (Haskin 1998), as indicated above, the spread pattern in the iron values in the megaregolith does not support this concept as the sole explanation, particularly for the Highland II Province.

There are unexplained gaps of low iron in the iron distribution where an even spread would be expected from such a major fallout/s of material. If there has

been a Moon-blanketing event, such as by the Imbrium impact, one would expect very high, suborbital velocities. Thus, the material would rain down from very high altitudes and in such volumes that it should overcome any topographical effects. No significant gaps would be observed. However, there are observable areas of Highland I material in Highland II regions. The data simply do not support the hypothesis that basin impact ejecta are responsible for the genesis of the Highland II province. An example of the Basin Ejecta model is that a single major impact that formed the Imbrium basin covered most of the Moon's surface with ejecta as proposed by Haskin (1998). If Haskin's hypothesis of Imbrium ejecta having "global consequences" covering the whole Moon with material of up to several hundred metres in depth was correct, the geochemistry of the regolith should reasonably reflect the geochemistry for the megaregolith over the entire Moon. This is because the material would have a common source. However, the results of this study clearly do not support that contention. Given the differentiation between regolith and megaregolith material, for the Basin Ejecta concept to work, megaregolith with elevated iron would have to fall faster than regolith with lower iron content. That is simply poor physics, as the acceleration due to gravity is exactly the same for all bodies regardless of mass, shape or size (e.g. Ohanian 1985).

Mare Nectaris basin ejecta clearly contain higher iron values than highland material (Figure 3-27). It is apparent that, to a certain extent, Province Mare I megaregolith surrounding Nectaris is the ejecta deposited by the Nectaris basin-forming event. Nectaris itself has been classified in Figure 3-27 as Mare II; however, in Figure 3-1 about three or four data values of Mare III classification in Nectaris may be observed. These very high values have been averaged out in the interpolation process.

For Nectaris and Imbrium it might be speculated that the excavation and ejecta deposit of highly mafic material might be of deep crustal origin. Alternatively, excavation of pre-existing cryptomaria could also supply the iron-rich material and still overlay anorthosite bedrock. This is supported by Tompkins and Pieters (1999), who clearly showed that most of the peaks analysed reveal that the bedrock is anorthosite. In a small number of cases, the peaks are a mixture of anorthosite with some mafic material, which indicates mixed bedrock. The titanium content in these regions could simply imply that the megaregolith reflects mostly the titanium-rich basalt as its source, and not the bedrock or deep crust. This may imply that the basalts of Nectaris and Imbrium are quite thick.

The megaregolith in and around Mare Orientale is Highland II material, and does not display the extensive iron signatures of Mare Imbrium and Mare Nectaris, for example. While Orientale has a few craters with medium iron values (~6.5%), there are also some unexpectedly low iron readings, with an arc of Highland I megaregolith on the northern side of Orientale. In addition, in Figure 3-1 there is one point classified as Mare I, but this has been averaged out by interpolation during production of the new Province Maps (Figures 3-27 and 3-29). Because of the presence of so much low-medium iron material in the Mare Orientale megaregolith, the ejecta are interpreted as predominantly anorthositic, in agreement with Spudis et al. (1984).

Although Orientale is said to exhibit an "archetypical" multi-ring basin structure (Spudis, 1993), the observed data spread may be because Orientale was formed with multi-ring structures, but not like other basins in other respects. The basaltic flows in Orientale are interpreted to be relatively thin and the underlying

anorthositic crust is relatively thick. This agrees with the expectations of Spudis (1993). The Orientale megaregolith data; however, provide a surprising result, as a more mafic megaregolith was expected. Figure 4-1 (Tompkins and Pieters, 1999) seems to indicate that the underlying bedrock, is mostly anorthosite, which agrees with the findings of this study. Spudis (1993) speculated that the basin formed prior to the basalt flows, and the present result supports this idea.

It is interesting to note that in Orientale that there are 3 examples of higher titanium signatures (Titanium Province II) that coincide with the higher iron. These higher titanium values are interpreted to be from titanium-rich basalt.

The new megaregolith maps are in general agreement in supporting a possible deep crustal origin for the Imbrium basin and Nectaris basin ejecta. However, the megaregolith maps give no indication of a deep, highly mafic signature at the location of Mare Orientale. Although the surface layers of Mare Orientale are basalt and therefore clearly mafic, the maximum values for its megaregolith are only 6.4% iron (Highland II Province) and 2.5% titanium (Titanium II Province). Hence, as previously stated, the megaregolith data do not indicate a highly mafic deep crust source.

Lunar Bedrock Map

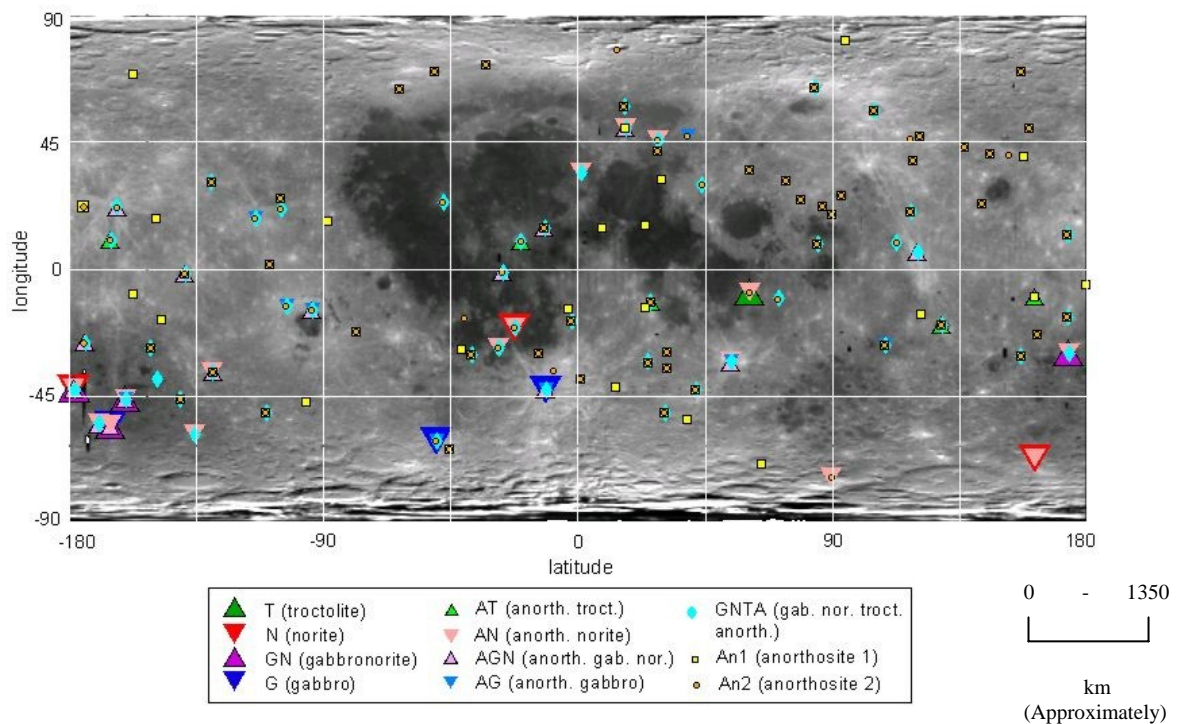


Figure 4-1 Lunar Bedrock Map by Tompkins and Pieters (1999) derived by means of an analysis of central peaks (see Figure 1-9) of 109 craters, using Clementine spectral data and testing of lab samples. Depending on latitude, the pixel size was 100 metres to 200 metres using Clementine UVVIS data (an approximate map scale bar has been added).

4.4 Relationships between the "units" of a) Megaregolith, b) Bedrock, and c) Deep Crust

The relationship between the three units of “Megaregolith”, “Bedrock”, and “Deep Crust” is a fascinating key to understanding the development of the Moon over geological time.

As has been shown, the megaregolith does not always reflect the bedrock. This is supported by the work of Tompkins and Pieters (1999), Figure 4-1. Much depends on the geographic location as the relationship varies from place to place because of the differing geological history for each place.

In the case of the Iron Highlands I Province, the low iron content of the megaregolith does mostly reflect the anorthositic bedrock which is also in agreement with the model proposed by Ryder and Wood (1977) which has previously been mentioned. This implies that the bedrock is the source of the megaregolith. The low-medium values of the Iron Highland II Province megaregolith that includes the underlying material of Orientale and Mare Moscoviense could be a result of anorthosite and basalt/ mafic magma intrusive structures of sills and dykes mixing with pre-existing anorthositic material, although the proportion is difficult to determine. This Intrusion model (Figure 4-2, and the variation Figure 4-3) might explain the existence of the Highland II Province. Although Norman and Ryder (1980) indicate that there were ferroan anorthosites that crystallised out of the magma ocean and after occurring so early in the Moon’s history, one might expect that this ferroan anorthosite should occur in even layers or some similar consistency in its distribution. However in Highland II areas, some craters ejecta in the data set for this thesis when viewed individually show high to a very high iron values in one or two part of the ejecta, for example the 12.00 o’clock position and the 3.00 o’clock position or other positions but very low iron in the other positions (See Table 4-1). In Table 4-1 the range in standard deviation of iron values even for nearby craters indicated that the sample data values from each crater ejecta can vary widely. It can also be seen in the dataset (see Appendix C) that that nearby individual craters in the same terrane type may exhibit all low iron in their ejecta and other craters further away have a wide variation in the iron values in their of their ejecta. This would imply that the distribution of any basaltic or mafic material is uneven and somewhat random and not layered. Based on this information, it would appear that there are, quite possibly, discrete iron bearing bodies possibly such as basalt / mafic sills and dykes to explain this observation and not layered structures, which should provide a more even distribution of iron values, as implied by Norman and Ryder (1980). Therefore this would supply additional evidence to support the Intrusion model and throw some doubt on the Norman and Ryder (1980) model for Highland areas of the Moon. It could be noted that although the Norman and Ryder (1980) work was based on Apollo 16, and 17 sample data that these samples are from two mare sources alone. The data set for this thesis covers the globe of the Moon. It can be noted that the previously mentioned Ryder and Wood (1977) Norite model does not conflict with the Intrusion model proposed in this thesis to explain the enhanced iron levels of Highland II.

Table 4-1 Examples from study data set of Iron data variance in individual craters in Highland areas.

Sample Data for Highland Standard Deviation of Analysis of Lunar Crater Ejecta.								
Crater	Co-	Ordinates	Crater	Av. Iron	Av.	Standard	Standard	Highland
Number	Latitude	Longitude	Diameter	Weight	Titanium	Dev.	Dev.	
			(km)	%.	Weight	Iron	Titanium	
					%.			
3	7.7	1.4	23.0	9.4	1.6	0.7	0.3	X
4	1.7	5.2	10.7	8.0	0.8	0.5	0.1	X
5	1.6	6.9	6.0	4.9	0.6	0.9	0.1	X
8	21.5	1.9	20.0	6.9	0.6	2.0	0.2	X
12	40.3	4.9	14.0	9.2	1.0	1.5	0.2	X
19	58.9	17.2	22.1	9.3	0.6	1.7	0.2	X
21	45.6	20.1	11.9	8.1	0.5	1.7	0.2	X
22	42.5	13.6	12.5	4.6	0.6	1.7	0.2	X
23	38.6	10.8	33.5	6.0	0.7	2.4	0.2	X
85	23.9	57.0	21.0	5.3	0.8	2.0	0.2	X
86	20.4	49.4	18.9	4.2	0.8	0.7	0.1	X
87	28.8	55.0	11.9	1.5	0.3	1.1	0.1	X
88	27.1	60.1	31.6	2.7	0.5	0.8	0.2	X
89	36.5	53.7	25.5	4.0	0.4	1.1	0.1	X
90	33.8	58.6	13.5	3.9	0.3	1.7	0.1	X
91	37.3	59.7	15.5	2.8	0.4	1.4	0.1	X
92	40.6	55.6	16.8	3.4	0.3	1.1	0.1	X
93	43.4	52.6	11.2	6.1	0.6	1.6	0.2	X
94	43.0	66.3	18.7	6.4	0.7	2.1	0.4	X
95	45.0	51.9	12.6	5.5	0.4	0.9	0.1	X
96	46.3	39.2	14.3	6.7	0.5	2.2	0.2	X
97	56.3	55.4	14.7	3.5	0.3	1.8	0.2	X
98	58.8	52.8	13.2	4.1	1.0	2.8	1.8	X
104	53.5	66.1	18.0	2.6	0.3	1.7	0.1	X
105	54.4	62.5	29.2	3.4	0.4	3.2	0.3	X
106	49.1	63.3	10.0	4.3	0.3	1.8	0.2	X
107	49.1	63.3	10.1	5.0	0.4	2.0	0.2	X
108	48.0	64.1	13.6	3.9	0.5	1.8	0.2	X
109	47.4	70.0	11.1	4.5	0.4	2.2	0.2	X

No deep crust relationship to the megaregolith is observed in the megaregolith for Provinces Highland I and II. If a relationship existed between deep crust and Highland I and similarly between deep crust and Highland II then higher mafic levels would be expected to be in these units. This assumes that deep crust is highly mafic, which is in line with current thinking (Taylor, 2001). The anorthositic content of the Highland II region was probably sourced from the bedrock.

In an alternative “Thrust Block” model proposed in this thesis (Figure 4-4), there are two classes of anorthosite and those are Highland I (iron weight percentage between 0% and 3%) and Highland II (iron weight percentages between 3% and 6%). In the Thrust Block model, basin formation causes rotational or similar

faulting and thrusting up of blocks of deep mafic material. The anorthosite mechanically mixes with some of the uplifted mafic block material to provide the additional input of iron to form Highland II. The low-iron Highland I Province was too far away from basin-forming events to be affected. For this model to be correct, the degree of uplift of the mafic block should decrease in proportion to the increasing distance from basins. In this model, the mafic block/s has/ have partly displaced the overlying anorthosite (adding to the megaregolith?).

While it is difficult to determine conclusively which model is correct, the Intrusion model seems to fit more comfortably with the available data than the Thrust Block model. In the Iron Megaregolith Province Map (Figure 3-27), “islands” of Highland I can be seen in regions of Highland II. This is consistent with intrusions, as in the Intrusion model, isolated and disconnected regions of material such as islands of Highland I can exist. In contrast, the Thrust Block model requires large-scale uplift of blocks of mafic material around basins, and this is unlikely to leave islands of unaffected Highland I material. A second problem for the Thrust Block model is how it can displace the overlying anorthosite and not leave an alternating structure of Highland I and Highland II across the surface. A third problem for the Thrust Block is that it does not include a suitable mechanism for the mixing required to create the Highland II material observed from the data.

A Third Model, “The Basin Ejecta” model, has been proposed in the past by such workers as Haskin (1998) and earlier workers. Haskin proposes that the Imbrium impact ejecta was globally significant to the Moon’s surface to a minimum depth of 210 and 640 metres; however, the results of this study do not support that contention. Furthermore, the Basin Ejecta model does not explain why islands of Highland I material exist in Highland II regions.

The Iron Mare Provinces I, II, and III are of increasing iron weight percentage value (see Figure 3-27). It would seem that initially, deep crustal material, restricted to the localised impact site of the basin-causing events was then later added to by basalt as sources of the iron of the maria subsurface (megaregolith). Figure 4-1 indicates that the basement rock is mostly “anorthosite” to “mixed” in composition in some cases. This mixing probably occurred when the mare basalt flowed over the anorthositic material and partially melted it and thereby mixed to varying degrees as evidence exists that there have been successive flows and not a single flow (e.g. in northern Oceanus Procellarum, Burroughs and Spudis 2001). The megaregolith, except for Highland I Province, does not seem to be entirely related to the bedrock. The relationship between megaregolith and deep crust is not as clear as the relationship between anorthositic bedrock and the overlying Highland I material, due to lack of data. The megaregolith data set cannot “see” to the depths required to study the “deep crust”, as the basin-forming events excavated to greater depths (see Figure 1-2). While the work of Tompkins and Pieters (1999) does indicate the maria bedrock material is mostly anorthositic, the maria basalt source is the mantle (Green et al., 1975).

The megaregolith data of the South Pole Aitken basin seem to represent the only major area of potentially deep crust, as the readings are consistently mafic, as indicated in Figure 4-1. This result is also supported by Lucey et al. (1998A).

The titanium megaregolith data clearly follow the distribution of titanium-rich basalt flows and do not reflect the bedrock or deep crust. Instead, the titanium-rich megaregolith thickness variations and structure seems to more reflect the reverse topography of the pre-existing surface. In other words, after major impacts,

titanium-rich basalt flowed into the lowest topographic areas, and produced the thickest amount of titanium-rich megaregolith (see Figure 3-29).

4.5 Review of models of the Lunar Origin and Crust

Since early times there has been much speculation regarding the origin of Earth's Moon. Early civilizations attributed the Moon's origin to various divine forces. In modern times George Darwin in 1879 speculated that the Moon formed from the Earth by fission, caused perhaps by a large body passing nearby. In two other modern classics, Gerstenkorn (1955) proposed gravitational capture of a body passing through the Solar System, whereas Schmidt (1959) who suggested that the Earth and Moon coalesced having formed at the same time as "sister planets".

After the Apollo landings, experiments and derived data, first discussed by Hartmann and Davis (1975) and later detailed by Cameron and Ward (1976), proposed that early Earth was hit by a Mars size object and that a rebound or splash occurred. The result caused by coalescence was the formation of the bodies that we now call the Earth and Moon. Computer model simulations by Kipp and Melosh in 1986 (Figure 1-1) suggested that this was a feasible scenario.

According to Cameron and Canup (1998), the result of this collision was a larger body – the Earth, and a smaller body – the Moon, with numerous moonlets. Most of these moonlets collided with either the Earth or the Moon, being caught up by their respective gravity fields, while the remainder escaped into space. The Moon accumulated quickly, allowing the outer part to completely melt. As its molten mass crystallised, the less dense mineral plagioclase floated to the surface to form an anorthositic crust.

The data in this dissertation cannot provide evidence to support or refute any particular model of lunar origin. Nevertheless, the Collision Theory (Hartmann and Davis 1975, Cameron and Ward 1976), as demonstrated by Kipp and Melosh (1986) computer simulations, remains the most widely accepted lunar formation theory.

4.5.1 Magma Ocean Models

The heat from the rapid accumulation of the Moon meant that the body was entirely or partially molten (Taylor, 2001). Figure 1-2 (Taylor, 2001) provides a more recent graphical representation of the competing hypotheses of the magma ocean models. One model proposes that the Moon was totally molten, and the other, that the Moon was partially molten.

On the Moon, there is large-scale chemical differentiation between the highlands and maria (Heiken et al., 1991, pp.10-13) and this may possibly be so for the South Pole Aitken basin floor as well. Since the highlands are recognised to be composed mostly of calcium-rich plagioclase ($\text{CaAl}_2\text{Si}_2\text{O}_8$) (various workers) this led Wood et al. (1970) to propose a model of a deep magma ocean. In this model, the entire Moon was initially molten. Where the calcium-rich plagioclase, because of displacement, floated to the surface, heavier/ denser mafic material migrated toward the centre of gravity. While parameters such as the "depth" of this proposed magma ocean have been debated by workers such as Warren (1985) and additional geochemical work has been done by Taylor and Jakes (1974), the basic concept has survived various revisions (Heiken et al., 1991 pp 15 -19).

An alternate model of formation for the lunar magma ocean is a synthesis of studies modifying Wood's basic idea and completed between 1970 and 1974. This work limited the magma ocean to the outer ~ 300 km (Heiken et al., 1991, pp15-19). Rather than having the heavier mafic material migrating or being displaced to the centre of gravity, the interior remained in a primitive unmelted state.

4.5.2 Lunar Cataclysm Controversy and Competing Models.

A major controversy of long standing has been the “Lunar Cataclysm Debate”. The debate revolves around whether there was a major cataclysm and a steady decline of impact activity on the surface of the Moon with minor “spikes” of increased bombardment as proposed by Hartmann; or alternatively, no major cataclysm but a smaller impact rate with a major “spike” of basin formation in impact activity on the Moon as proposed by Ryder.

Models proposed by Hartmann and Ryder (Ryder, 1990), as introduced in Figure 1-6, can be reviewed in the light of these new results. In particular, the iron (FeO) and also the titanium (TiO₂) data, imply that the megaregolith appears to be well mixed to a depth of up to several kilometres in places and therefore vertically homogeneous. This vertical well mixing (see Figures 3-27 and 3-29) tends to support Hartmann's model of initial major cataclysm after formation and a continuous decline in impact events. However, the data cannot rule out the much larger “spike” of basin formation later in the Moon's geological history, as proposed by Ryder (Ryder 1990), as the basins obviously exist. Perhaps some combination of these two models might a better explanation of the situation. While the degree of cataclysm, no doubt, will continue to be debated, it would be difficult at this time to further quantify any particular model without additional study.

4.5.3 Comparison of results with previous models and ideas

The new results from this thesis that show less dense anorthosite is the predominant material in the upper crust, to the depth available to this study, when compared with the denser basaltic material that seems to have flowed over the anorthosite bedrock in most areas to form the maria. This tends to support the Magma Ocean concept in Figure 1-2, but cannot definitely distinguish between the two alternative models. Both models have mare basalts ascending from magma source zones of between 150 km and 450 km in depth. The results from this thesis are consistent with the idea of magma source zones. With a few exceptions, this is because the megaregolith in mare areas mapped here does not correlate with the Bedrock Map of Tompkins and Pieters (1999). Thus, it could be speculated that places where the megaregolith and crater central peak data more or less do not agree such peaks might be near magma vents. The anorthosite bedrock in mare areas cannot be the source of the megaregolith and we must include the presence of magma bodies to produce high iron basalt to overlay low iron anorthosite.

The plots of Mare Iron (Figures 3-10, and 3-11) and Global Titanium (Figure 3-17) Mare Titanium (Figures 3-23) Weight Percentage distributions on average indicate a decline in concentrations of iron and titanium with increasing depth and then an increase for largest diameter craters. The iron (FeO) analysis therefore would imply at least three layers of rock. The uppermost is of high iron basalt, while the one beneath is of lower iron (anorthosite?), and the third or deepest layer is highly mafic material (deep crust?). This may indicate the existence of discrete

sources of magma that flowed over mostly anorthositic bedrock. This will be summarised in Chapter 5 “Conclusions”.

An earlier crustal model by Ryder and Wood (1977) is the “Norite” model (see Figure 4-2) – a three layer crustal model that was proposed based on Apollo 15 and 17 sample data and infers a depth of around 60 km from the sampled material as depicted in the Figure. While this works investigates depths of up to 5 km. The Ryder and Wood model does not use any actual material from Highland II or Highland I regions in the analysis. It is difficult to compare the work of this thesis and the Ryder and Wood (1977) since the data of these two works deal with different sensitivities and depths, This thesis has more detailed data over the globe of the Moon, whereas the Ryder and Wood (1977) uses data to infer this model from samples from two source locations. Nevertheless, it may be interesting to use for comparison in the maria regions, as there does seem some grounds for agreement.

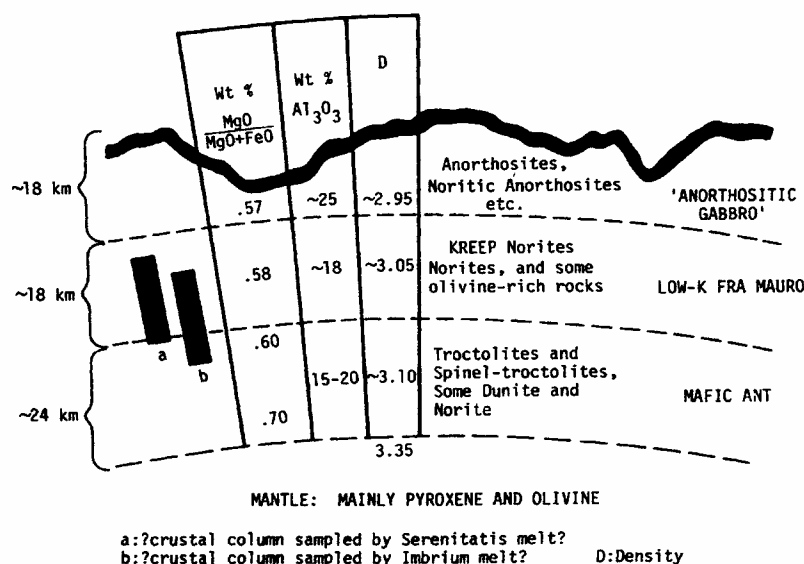


Figure 4-2 Norite model proposed by Ryder and Wood (1977). The data used for this model was sampled by Apollo 15 and 17 Astronauts from Mare Serenitatis and Mare Imbrium regions.

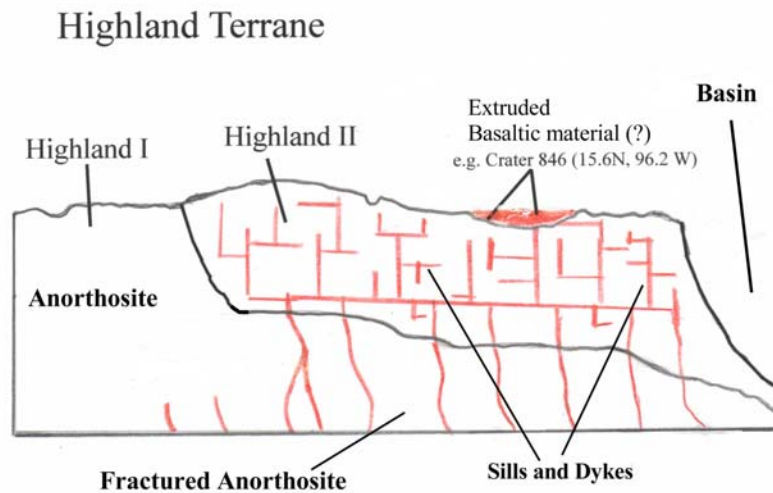


Figure 4-3 The Intrusion model where basalts intrude the fractured anorthosite bedrock to then intrude the anorthosite megaregolith to form Highland II megaregolith. To support this model it is interesting to note one clear example from Table 3-1 of Crater 846 (15.6 N, 92.2 W). The crater's position is west of Northern Oceanus Procellarum and within the Highland Terrane. This crater is in a small area that is higher in iron and slightly higher in titanium, possibly from basalt being extruded onto and over the surface.

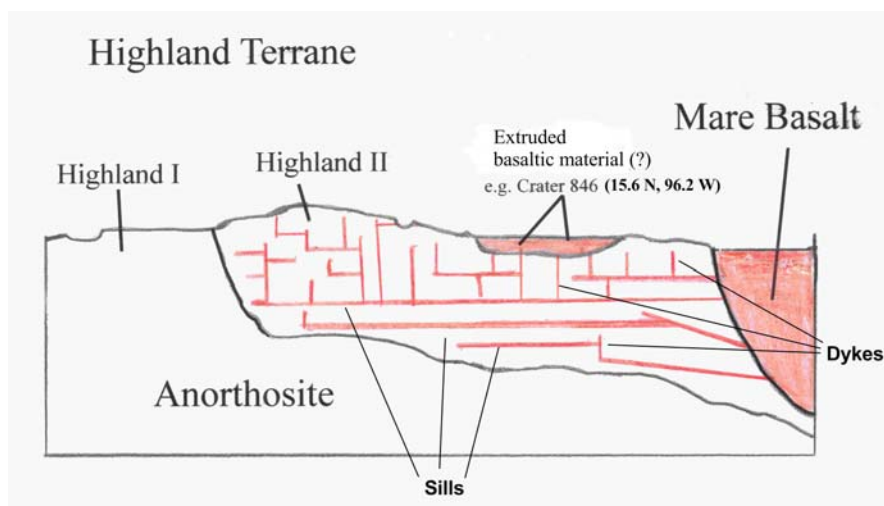


Figure 4-4 This variation of Intrusion model illustrates how sills and dykes may have intruded the anorthosite megaregolith to provide the medium iron readings obtained from analysis of ejecta of craters in the region surrounding the maria and basins referred to as Highland II (3.0 to 6.0% iron). However this variation seems less supportable as evidence reveals that Mare basalts are the result of several flows and not a single event (e.g. Burroughs and Spudis, 2001).

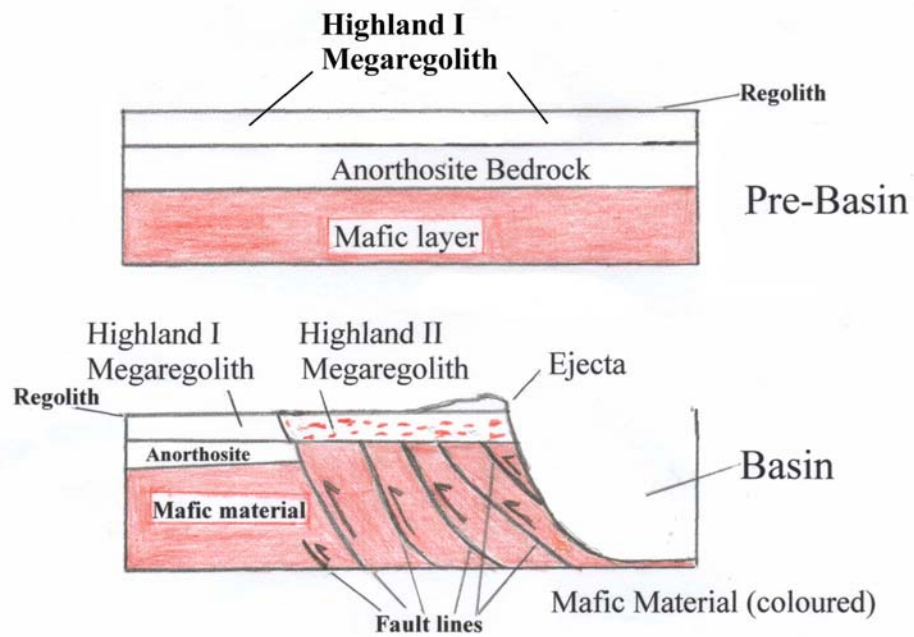


Figure 4-5 The “Thrust Block” Model on a regional scale as depicted above relies on the lower mafic material being thrust and uplifted, when impactors excavate a nearby basin. The blocks of mafic material mix with the anorthosite megaregolith to provide the medium iron megaregolith readings, referred to as Highland II (3.0 to 6.0% iron). The Highland I megaregolith iron content is much lower (0.0 to 3.0 %).

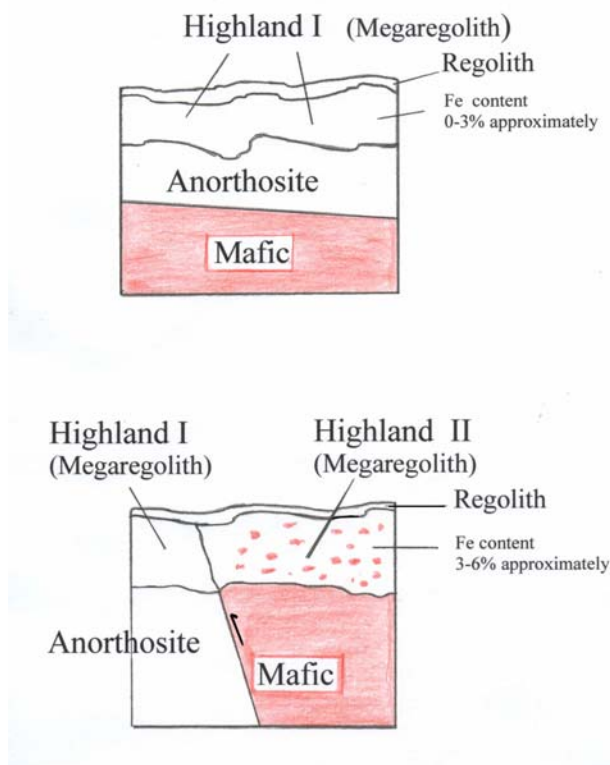


Figure 4-6 A Localised version of the Thrust Block Model depicting lower iron Highland I and low-medium iron Highland II.

4.6 The relationship of the megaregolith, compositionally to the Lunar Crust, Upper Crust, Middle Crust, and Lower Crust

The megaregolith represents a major proportion of the Lunar Crust that has a composition that varies and is not always related to that of the bedrock. On a global scale, its composition is complex (see Figures 3-27, and 3-29).

The surface regolith material is subjected to the solar wind that can cause alteration by adding ions and elements to the regolith; this can alter its spectral signature (Hapke 1993). This alteration is dependant on the duration of exposure and is referred to as the “maturity index” (Korotev and Morris, 1998; Lucey et al., 1998B; Lucey et al., 1998C; Lucey et al., 2000B). The Lucey algorithm (Lucey et al., 2000A) has accounted for the Maturity Index to ensure the reliability of the Clementine remotely sensed data (Lucey et al., 1998C).

It appears that in the Highlands, the regolith is broadly compositionally similar to and appears to be mostly derived from the megaregolith. (Although, in the case of the low-medium iron-containing megaregolith of Highland II Province, it is covered by anorthositic regolith.) The Intrusion model for the megaregolith low-medium iron Highland II Province discussed in this thesis could explain how this is possible. In the maria, the regolith is sourced from the basalt (Heiken et al., 1991, pp. 88-92), whereas the subsurface material is sourced in some cases from the

bedrock, but mostly from the basalt flow (see Figure 4-7). It is conceivable that, before the basalts flowed into the basins, basin ejecta may have been re-deposited in the basins. Further, some minor amounts of Highland anorthositic material from impact ejecta may have been deposited around the periphery of basins.

The Highland II region observations can be considered in the context of several models. The “Intrusion” model (Figure 4-2) suggests that basin formation cause fractures in the lunar bedrock, and allows basaltic / mafic magma to flow into the megaregolith in the form of dykes and sills. This would provide the medium iron values and hence the observed Highland II Province. When the impactors excavate this material, the anorthosite and the basalt intrusives are mixed to provide the Highland II material. A variation of this might be that as the basins flood with basalt that the basalt intrudes the anorthosite megaregolith to form Highland II (Figure 4-3). The second model, the “Thrust Block” model (Figure 4-4), requires the faulting and uplifting of large blocks of mafic material that allows such material to be closer to the surface than otherwise. In this model, the mechanical movement of the mafic blocks into the anorthosite causes some initial breaking up of the blocks and mixing. Later there is a further mixing of the anorthosite and mafic material during the excavation action by small impactors in Highland regions. This could possibly provide a class of anorthosite, Highland II, which has a medium iron content (~3% to 6%), but should also lead to concentric banding/zones of alternating Highland I and Highland II material, something that is not observed.

The “Basin Impact Ejecta” model is yet another model that might be used to explain the relationship between the various sections of the lunar crust and the megaregolith. As an example, Haskin (1998) states that the Imbrium event would have distributed some 3.2×10^7 cubic km, “enough to cover the surface of the Moon to a depth of between 280 and 850 m”. The Imbrium impact was clearly a major event. If Haskin is correct then a more widespread coverage of mafic material over the Moon’s surface would be expected considering the depth of excavation. However, the results of this thesis do not reveal that. Instead, the maps seem to display a more limited ejecta distribution (see Figure 3-27). Nevertheless, it is certainly conceivable, based on the Clementine-derived data for this study, that ejecta from such an event could be distributed around the immediate vicinity of the basin, and similarly around other basins (Figure 3-27).

Thorium could be a useful geochemical marker in understanding the extent of Imbrium’s ejecta distribution. Haskin (1998) diagram (Figure 4-7) describes a thorium-rich oval using Apollo orbital gamma ray spectral data (Metzger et al., 1977) that may well be a guide to the distribution of the overall ejecta from the Imbrium event (see Figure 4-6). Furthermore, thorium is a good indicator of the extent of the Imbrium ejecta as such relatively high concentrations are particular to only that region of the Moon.

If the ejecta distribution is restricted, then the possibility is raised that the kinetic energy of the ejecta is a smaller proportion than is usually inferred of the total energy from the impact formation of this basin and other basins. Furthermore, this restriction would imply that such events could not have a widespread impact on the Moon’s global surface, as proposed by Haskin. This more restricted ejecta pattern would be in reasonably close agreement with the data set derived from this study (compare Figures 3-27 and 4-6). Following this reasoning, this would limit ejecta from other basins and maria to their surrounding vicinity. The impacting trajectory can influence the direction of the spray of the ejecta. However, this Impact model does not explain the Highland II megaregolith material on the far side

of the Moon (e.g. around and northwest of Mare Moscoviense), nor its extent around other basins, or the extent of the anorthosite of Highland I megaregolith on other parts of the Moon. The data set used in this study places severe constraints on the Basin Ejecta model to provide material for Highland II. The Intrusion model can easily do so although the Thrust Block model cannot be ruled out. Nevertheless, the Intrusion model appears the most likely explanation at this time.

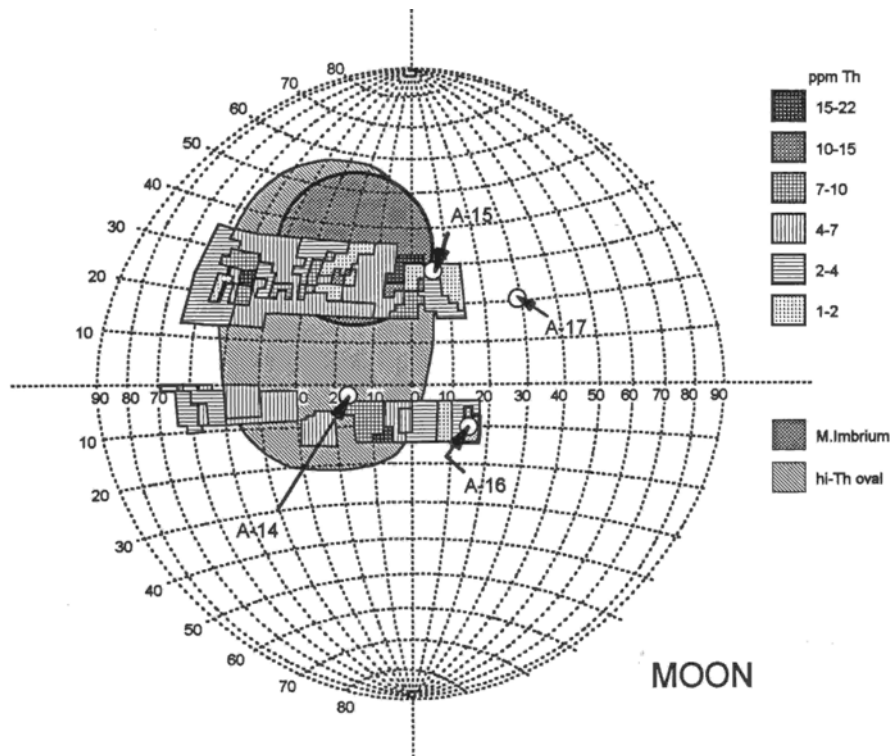


Figure 4-7 A diagram depicting the deposit of thorium from Imbrium ejecta based on Apollo gamma ray spectral data acquired from orbit and correlated with Apollo samples (after Haskin, 1998). This may indicate the extent of all ejecta from the Imbrium event.

The relationship of the megaregolith to other crustal units can be seen illustrated in Figure 4-8. The megaregolith composition varies from anorthositic (low-iron Highland I Province) to mixed (in places such as the iron enhanced Highland II Province where the megaregolith may have been intruded by mare magmas or another magma source) and to basaltic (iron-rich Mare I, II, and III Provinces). The compositional relationship of the underlying megaregolith to the surface regolith is not completely clear as the surface regolith is constituted by a mixture of possibly some megaregolith-derived material and minor meteoric material.

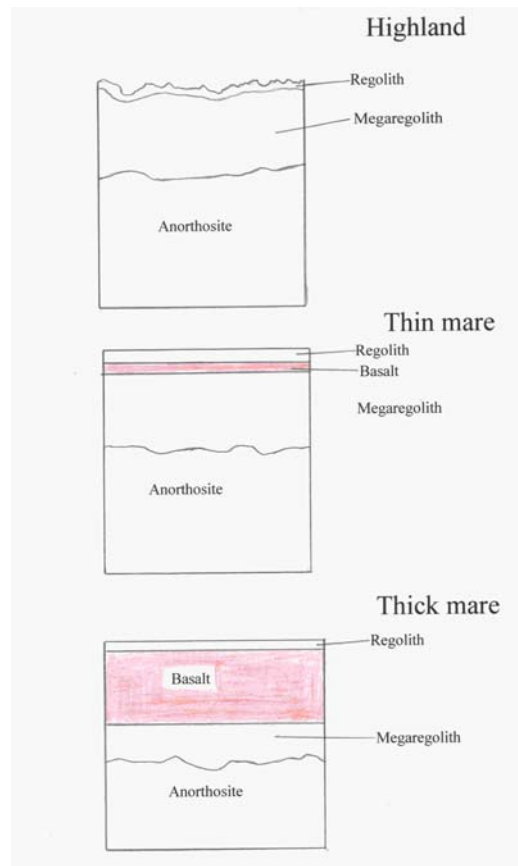


Figure 4-8 A general diagram that broadly illustrates the qualitative differences in megaregolith thicknesses among highland, thin mare, and thick mare. The formation of some very deep mare may have excavated all the megaregolith.

Tompkins and Pieters (1999) (Figure 4-1) examined 109 central peaks of craters with diameters from 40 to 180 km that exhumed materials from depths of approximately 5 to 30 km (Tompkins and Pieters 1999). This material is derived from deeper in the crust than the megaregolith (see Figure 1-9), and can possibly provide an opportunity to look at more mafic material (i.e. low calcium, pyroxene rich compositions). A comparison can then be made with the megaregolith material. Review of the data provided by Tompkins and Pieters (1999), in Figure 4-1 of this thesis, indicates that a large percentage of the lower crust or bedrock is mostly anorthositic. The megaregolith is generally only related to the bedrock in Highland I, and to a lesser extent in Highland II Province areas, and in the South Pole Aitken basin. The basin-forming event that formed the South Pole Aitken basin excavated to a more mafic lower crust or possibly the upper mantle (Lucey et al., 1998A), and hence the megaregolith is in good compositional agreement with the bedrock in that region.

4.6.1 Compositional comparison between the megaregolith and the “bedrock”: more or less mafic than “bedrock”?

On review of the data, it is clear that the megaregolith varies in composition, for example see the new Iron Province Map (Figure 3-27), and Tompkins and Pieters Lunar Bedrock Map (Figure 4-1). This map (Figure 4-1) indicates that the

anorthositic bedrock underlying the Highland I province has about the same low iron content as the megaregolith lying above it. This therefore would imply that the bedrock in these regions is the source for the megaregolith. The Tompkins and Pieters Map broadly suggests underlying anorthosite bedrock has a lower iron content than the overlying Highland Province II megaregolith area around north-western Oceanus Procellarum and surrounding other impact basins and maria.

In the case of Orientale, it would appear that the bedrock is covered with a relatively thin basalt layer. The megaregolith classified as Highland II is a mixture of anorthosite and basalt. The Tompkins and Pieters Bedrock Map (Figure 4-1) indicates a mixture of anorthosite, anorthosite /norite and anorthosite /gabbro in this region.

When the Iron Province Map and the Tompkins and Pieters Map are compared (see Figures 3-27, and 3-29), regions such as eastern Procellarum, parts of Mare Imbrium and other maria appear more mafic than the basement. The “U” shape in the plot of Figure 14C (Mare Iron) indicates that the surface layers contain high iron levels (basalt), underlain by a zone of lower iron levels (anorthosite bedrock?) below which is an even deeper zone of material of high iron content (deep mafic crust?).

In sections of the maria where there is no agreement between the mafic values of the megaregolith and that of the bedrock, as implied by Figure 4-1, these indicate that the megaregolith was derived from another source (see Figures 3-1, 3-2, and 4-1) such as the basalt material.

In a few maria areas, such as localised parts of Mare Tranquillitatis, southern Mare Imbrium, and southern Oceanus Procellarum megaregolith, there are some similarities between the megaregolith and the bedrock (see Figure 4-7). These localised areas are anorthositic material mixed with mafic material. This may imply that such areas are near sources of basalt (basalt-extruding fissures?). The basalt intruded or mixed in some way with the anorthosite.

Overall, the megaregolith is derived from materials that in themselves vary in mafic content from place to place, and imply that the crust of the Moon has developed a higher level of geologic complexity than previously thought.

4.6.2 Compositional Relationship between the Megaregolith and the Regolith

The iron distribution megaregolith map (Figure 3-27) and the iron distribution surface map (Figure 3-28) provide an interesting comparison and contrast. While the surface Highland regolith is anorthosite and a “grey” response is to be expected, the pink blush of colour exhibited in some locations on the figure indicating iron is a result of the iron content in the ejecta of many craters. This is particularly so around the basins where the impactor would penetrate into the megaregolith Highland II province, excavating medium level iron and depositing it on the surface, adding to the regolith. The flush of pink in some highland areas (Figure 3-28) might possibly be an indication of basalt extruded onto the surface at discrete locations. The regolith in Highland I regions, therefore, is interpreted to be, essentially, anorthosite that is derived from the megaregolith.

4.7 Variation of the Megaregolith thickness

The variation of megaregolith thickness depends on factors such as the thickness of the pre-existing crust and the size, number of impactors, and the duration of the impacts. This would determine how much material was produced, and what work was done by the impactors to produce the megaregolith over geologic time. The Croft /Grieve relationship (Croft 1980, Grieve 1981, and other workers) estimates that the depth of excavation of a simple crater is approximately equal to 10 percent of the diameter for craters less than 50 kilometres in diameter, as was used in this study. As different diameters give different depths, an absolute global determination of megaregolith thickness thus cannot be made and, because of the Croft/Grieve relationship, the study is limited to depths of 5 kilometres or less.

4.8 Scales of lateral and vertical heterogeneity for Iron and Titanium

On a global scale, there is lateral heterogeneity in the iron and titanium distributions in the megaregolith (see the megaregolith Iron Province Map, Figure 3-27 and the megaregolith Titanium Province Map, Figure 3-29). A global view allows a clearer appreciation of this heterogeneity than did previous studies that were conducted over small, localised areas. The higher values for iron (FeO) occur where there are observable basalt flows (Mare I, II, and III) and crater ejecta (Highland II megaregolith) that may have been the result of basalt or mafic magma intrusion (sills and dykes) mixing with megaregolith anorthosite. In the case of South Pole Aitken, this may be the exposed lower crust with some basalt flows.

The heterogeneity of titanium (TiO₂) occurs in a clustering fashion, indicating that it is predominately a nearside phenomenon (see the Titanium Province Map, Figure 3-29). Although the reason for this is not certain, one possibility is that the lunar crust is thinner on the near side (Taylor, 2001 and earlier workers). Being thinner, the crust may more easily allow titanium-rich basaltic lava to flow to and over the surface. In the megaregolith, the spread of titanium values is highly concentrated into smaller areas when compared with iron. Titanium is mostly clustered in the nearside maria, with a few points in the small far-side maria such as Mare Moscoviense and a northern arc of the South Pole Aitken basin. The main flows of titanium-rich basalts appear to be from Mare Imbrium and flowed over the older titanium-poor basalts of the northern Oceanus Procellarum (Jackson 2003A). The vertical distribution of iron on a crater-by-crater basis is mostly homogeneous to the level of the predominantly anorthositic bedrock in mare areas, as implied by the Tompkins and Pieters Map (Figure 4-1). For titanium, the vertical distribution is homogenous down to the upper level of titanium-poor basalts or anorthositic bedrock.

In Highland I and Highland II areas, iron is mostly vertically homogenous, although the Highland II constituents, according to the proposed “Intrusion” model in this thesis, are anorthosite and basaltic or mafic material. Highland II seems to have a regolith overburden of anorthositic material, and it overlays a mostly less mafic anorthosite basement, as implied by Figure 4-1.

4.9 The relationship of the megaregolith to "basin ejecta"

This study indicates that the relationship between megaregolith and basin ejecta is not necessarily direct or simple. Earlier workers such as Dobrovolskis (1981) and Housen et al. (1983) discuss aspects of this basin ejecta model and Haskin (1998) indicated that the Imbrium ejecta deposited "a tremendous volume of material over most of the Moon's surface". The new megaregolith Iron Province Map (Figure 3-27) indicates that this hypothesis, as it is currently presented, is unsupportable. The thorium distribution from Imbrium ejecta (Haskin, 1998) in Figure 4-6 may be a clearer indication of the antipodal extent to which the ejecta from the Imbrium event was distributed and therefore the ejecta may not be as widespread as previously thought. It can be noted in Figure 3-27 that there are significant gaps in (low-medium iron) Highland II Province material between some of these basin, at a number of locations. These gaps consist of significant areas of (low iron) Highland I Province material. Logically, it would be expected that Highland II material would be fairly evenly distributed if it were entirely sourced from the basin ejecta to the extent proposed by Haskin (1998). Although ejecta blankets can be asymmetric (Spudis, 1993), such a large excavation event as Imbrium should blast material to very high or suborbital altitudes. In such a scenario, therefore, any possible topographic shadowing fails to adequately explain the gaps observed in the iron distribution, as seen in the new Megaregolith Iron Province Map (Figure 3-27). Such topographical effects cannot explain areas such as those North and East of Orientale and approximately between 10 S and 30 S, 80 E and 100 E, as well as a number of smaller areas that are clearly seen in Figure 3-27. However to have these islands of material of Highland I type this would imply a need for two or more impactors, on different sides of these areas or "islands", to hit the Moon's surface at similar steep angles to the surface from opposite directions to produce ejecta patterns leading to such a result. Alternatively, the impactors would need to hit the Moon at similar very shallow angles to spray material asymmetrically away from the "island" of Highland I megaregolith material. As there are a number of such "islands" of differing size, there would seem to have been an even smaller probability that this happened at more than one place on the Moon's surface to give rise to such an outcome. While the idea that asymmetric ejecta blankets giving rise to these islands is not impossible, it would seem highly improbable given the very high altitudes to which material would have been sent by the Imbrium event. It could be speculated that in the balance of the energy equation for a major impact event, less energy was expended in distributing the ejecta blanket than previously supposed, therefore limiting the ejecta coverage. This speculation requires further investigation that is outside the scope of this thesis.

The medium to high iron signature immediately around the edges of basins suggests the presence of basin ejecta some of which might have been anorthosite, probably with input from basalt lava flows or intrusions. These flows may have covered any sign of direct evidence of basin ejecta and the resultant mixing may have provided a lower than what might be expected iron signature.

While basin ejecta might partly add to the surrounding megaregolith, the megaregolith data in this study place severe constraints on the area that could have been blanketed by these ejecta. On the other hand, the graduated appearance of the

iron-rich material around the immediate vicinity of all basins (except Orientale and Mare Moscoviense) does support the idea that there has been some limited input into the megaregolith by various basin ejecta in their immediate vicinity, but not over the globe of the Moon. As discussed earlier, the bedrock (Figure 4-1) in these basins mostly does not match in composition the megaregolith material in impact basins.

In western Imbrium there does, however, appear to be a mixed situation, with norite indicating plutonic origin (Figure 4-1), in closer agreement with the overlying basalt than in other areas, while in other parts there is a mixture of anorthosite / norite. While basin impacts such as Imbrium may have contributed to some degree to the distribution of material (ejecta), the severe constraints provided by these new data imply that the distribution of iron in the megaregolith is far more complex than can be explained by basin excavation providing all the deposited material.

4.10 *Origin of the Highland II Province*

The Intrusion Models (Figures 4-2, or 4-3), the Thrust Block Model (Figures 4-4 and 4-5), or the Basin Ejecta model (see example Figure 4-6) are explanations for origins of the formation of the low-medium iron Highland II Province material, however other explanations still may exist. The Basin Ejecta model has been discussed earlier and it has been shown that the Clementine derived data set used in this study places severe constraints on this model (see Megaregolith Iron Provinces Map, Figure 3-27). This study appears to limit any possible contribution of mafic material to the Highland II province to areas immediately surrounding the basins. Dobrovolskis (1981) and Housen et al. (1983) discuss aspects of this basin ejecta model. In the Imbrium case, Haskin (1998) argues for a Moon-wide ejecta blanket and therefore favours this model, using the supporting evidence of Apollo orbital gamma ray spectral data in conjunction with Apollo samples. However, Haskin's graphic depicting the thorium ejecta blanket indicates a more limited ejecta blanket (see Figure 4-6). In addition, this model implies that higher iron material was laid down in an ejecta blanket below the lower iron material, so higher iron material would need to fall faster than lower iron material, and that is physically incorrect. Furthermore, the islands of low iron Highland I megaregolith that exist within the Highland II megaregolith should have been covered by the ejecta blanket that would be expected to be blasted to very high and suborbital altitudes. While asymmetric blankets can occur due to the angle of impact trajectory (Spudis, 1993), as previously discussed, the probability of impactors striking the surface at certain angles to produce such an outcome is small, when it can be shown in Figure 3-27 that the outcome occurs in several locations. Thus, while basin ejecta input cannot be completely discounted as a possible source of some of the Highland II material it seems highly unlikely to be the sole source.

The Thrust Block model (Figures 4-4 and 4-5) approaches the problem of the existence of Highland II differently. This model proposes that deep mafic material was fractured and forced up in blocks by basin-forming events to somehow displace and mix with the overlying anorthosite, and so enhance the volume of the megaregolith and add iron rich mafic material. In this model, the resulting mixing of the anorthosite and mafic material produced low-medium iron Highland II megaregolith material. In areas farther from basins, there was insufficient energy to

fracture the mafic layer into blocks and to cause thrust or uplift. Those areas remained anorthositic and this is the area of low iron Highland I megaregolith material. While this model does explain certain aspects of the data set, it does not explain the isolated points within the megaregolith Highland I that have high iron values (see Table 3-1), nor does it satisfactorily explain the Highland I islands of material within the Highland II megaregolith. Further, the issue of the locations to which the anorthosite is displaced by the uplifted and tilted blocks of mafic material is unclear. Therefore, this model should be rejected in the light of available data.

In contrast, the Intrusion model (Figure 4-3) describes a situation where basin-forming events shatter the surrounding megaregolith. After this, the basins were later flooded by basaltic lava, and the megaregolith was intruded by basaltic or mafic magma to form sills and dykes. Since the megaregolith consists of very large pieces of rubble (Hartmann 1973), the hypothesis is that the impact events in this model increase the number of connecting voids in the megaregolith to varying degrees in different places. This initially allowed titanium-poor basalts to intrude into the anorthosite megaregolith part of the crust as sills and dykes. The bulk composition then reflected a mix of basalt and anorthosite that would provide an explanation for the origin of the low-medium iron Highland II Province. Later, smaller impactors strike these regions of the anorthosite, basaltic sills and dykes, and the resultant excavation thus mixes the material to provide the low-medium iron Highland II megaregolith readings. Some pristine igneous magnesium-suite highland rocks comprising norites, troctolites, dunites, spinel troctolites and gabbroic anorthosites (Taylor, 2001) related to basaltic (mafic) fragments were recovered by the Apollo 15 and Apollo 17 Missions (Heiken et al., 1991, p. 214). These mafic rocks are found in association with non-mafic anorthosite material. Although this association is a contradiction, this fact may provide additional evidence to support the "Intrusion Model" (Figure 4-2). The values of iron (FeO) of Highland II megaregolith material are not as high as iron values in the maria, but exist over a large area. Highland II material implies a mixing of anorthosite and a modest volume of basalt or mafic material in this Intrusion model, as described earlier. In the Intrusion model, the Highland II Province formation occurred as a consequence of basin formation and basaltic or mafic magma intrusion from deeper more mafic regions into the anorthosite megaregolith. Hartmann (1973) described the megaregolith as a breccia. The "rubble-like nature" of breccia is enhanced by forces fracturing rock during basin formation.

From the available data, it appears that the Intrusion model seems to fit most comfortably. Nevertheless, more evidence would be needed than is now available to make the case convincing. The Basin Ejecta model might have some contribution to the Highland II megaregolith material, although this study has placed important constraints on the extent of such input and it seems a highly unlikely model as the genesis for Highland II megaregolith.

From observation using Clementine data, the megaregolith Highland II Province is mostly covered by anorthositic regolith (Jolliff et al., 2000). Since the iron content seems to decline with depth, the Highland II material might be sandwiched between the mostly anorthosite surface (regolith) and bedrock. The only connections to the Mantle would be through the fissures and vents. The basin impact event may have even produced random radiating fractures.

Schultz and Spudis (1979) have previously described evidence for ancient mare volcanism. Taylor et al., (1983) identified an age of about 4.2 billion year for basalts in the Highland Breccia of Apollo 14 samples. Dasch et al. (1987) from

their analysis of Apollo 14 samples have applied an age of between 3.96 and up to 4.33 billion years. In the magma ocean crystallisation model by Shearer and Newsom (2000) studies of isotopes of hafnium and tungsten suggest that the magma ocean crystallisation must have occurred in less than 40 million years. This implies that some intrusions may have occurred very early, within 300 million years of the crust's solidification. This possibility depends largely on if any crypto-basins were formed at that early stage, since basin formation is required to shatter the crust to allow intrusion by mafic material.

Significant gaps of lower iron Highland I megaregolith material are observed in the Highland II megaregolith iron province (Figure 3-27). A possible explanation for this is that the rock in those areas is more competent and able to withstand the fracturing forces caused by the basin impact events. Therefore, in the more competent rocks there are a lack sufficient fractures and connecting voids that prevents basalts or mafic magma from easily intruding. This speculation would require more data from areas not sampled by the Apollo missions, something that will have to be sought by future Moon explorers.

5 CONCLUSIONS

5.1 *Principal findings*

In this chapter, some findings about the geological history of the megaregolith are drawn from the preceding discussion, and some follow-up research suggested.

5.1.1 Properties of the Megaregolith

This megaregolith data set provides new information for guiding studies of the Moon's crust and subsequent development of the regolith and megaregolith. The megaregolith / subsurface in mare regions is mostly derived from the basalt flows, with some input from basin ejecta. However, in the case of Mare Orientale and Mare Moscoviense the megaregolith is a mixture of mostly anorthositic material and basalt/ mafic material. If the Intrusion model is correct then this occurred by basalt/ mafic magma intruding into fractures or voids in the anorthosite caused by the basin-forming event (Highland II). The Highland I megaregolith generally agrees with highland bedrock being anorthosite or anorthositic in composition. Highland II megaregolith is higher in iron content than Highland I material (Figure 3-27).

The South Pole Aitken basin megaregolith composition is mafic and probably of lower crustal origin, with some basalt input to the iron (FeO) and titanium (TiO₂) values in the northern part of the basin. From examination of crater ejecta, the South Pole Aitken basin, as far as it can be determined, appears to be mostly a heterogeneous spread of iron and titanium values laterally, but the values appear to be mostly homogenous vertically within the megaregolith, although for titanium at depths below 1.7 km the values decline.

This is in contrast with the Highlands regions that seem to indicate a broad decline of iron and titanium values with depth. The maria, globally, display a broad decline and then at the greatest observable depths and an increase in iron and titanium values. This seems to indicate three layers of rock; the top being basalt, the middle of lower iron (anorthosite, or basalt mixed with anorthosite?), the third layer is generally higher in iron (deep mafic crust?) and occasionally higher in titanium. In the case of the maria, this may be a result of the basalt flowing over the excavated anorthosite, with basalt flows being extruded onto the surface and flowing over the basins from discrete locations possible mixing with the pre-existing anorthositic crust to form the megaregolith. This should be more accurately described, particularly in relation to deep maria, as “subsurface”, since “megaregolith” usually refers to anorthositic material alone. In certain instances, larger impactors penetrating to greater depths and in localised areas penetrating underlying anorthositic bedrock resulted in a display of mostly anorthositic/ mixed signature response with some mafic signatures (deep mafic crust?).

The higher iron values in the western mare, such as Oceanus Procellarum / Mare Imbrium/ Mare Humorum/ Mare Nubium, may indicate thicker basalts than the more eastern maria, such as Mare Serenitatis / Mare Tranquillitatis/ Mare Crisium/ Mare Nectaris, (see Figure 3-27).

5.1.2 Distribution

The megaregolith appears to be global and underlies the Moon's regolith (surface), except possibly in very deep mare areas where there are essentially only basalt flows, or possibly basalt mixed with remaining anorthositic material, as most or all of the megaregolith has been excavated by an impactor. In that situation, the material analysed should really be referred to as "subsurface".

5.1.3 Thickness

The data support the view that the megaregolith varies in thickness across the globe of the Moon and this again supports Hartmann's earlier work implying that the megaregolith is at least several kilometres thick. Highland regions seem to have a thicker megaregolith layer than other areas, where it may be that the crust is thicker, particularly on the far side (Taylor, 1982, p. 386), where most of the Highland crust exists (see Figure 1-3). However, because this study was limited to a maximum depth of approximately 5 kilometres, given the Croft/ Grieve depth to diameter relationship for simple craters (Croft 1980, and Grieve, 1981), a more quantitative analysis cannot be undertaken to determine the precise thicknesses of the megaregolith over all parts of the lunar globe.

5.2 *Origin of the Megaregolith Provinces*

A more complex picture of the megaregolith has been revealed by this study. The Crater Iron Ejecta Analysis Map (Figure 3-1) and new megaregolith Moon Iron Province Map (Figure 3-27) provide a more detailed picture than has been previously available. Highland Province I is largely anorthosite, and the source of the megaregolith is clearly from the deeper anorthosite bedrock. There are various explanatory models. The deposition of basin ejecta has been described by Dobrovolskis (1981), Housen et al. (1983), and Haskin (1998). The Basin Ejecta model has been shown earlier in this thesis as an unlikely source for the Highland I and Highland II megaregolith. In addition to the Basin Ejecta Model, the "Intrusion" model and the "Thrust Block" model may explain the genesis of the Highland II Province material although the latter is more restrictive and considering the work of Ryder and Wood (1977) seems the less probable. The Highland II Province material that is richer in iron (FeO) than Highland Province I also may be explained by these models.

Ryder and Wood (1977) devised a "Norite" Model based on Apollo 15 and 17 sample data of the Serenitatis and Imbrium basins. This Norite model most likely would not support the "Thrust" model. However the Norite model, would not contradict either the "Ejecta" or the "Intrusion" models. As stated previously, this thesis does not completely discount the Ejecta model; however it does place severe constraints as to the extent of how this mechanism may have affected the surrounding regions. The Intrusion model as described earlier seems to fit most comfortably with the data set of this thesis to explain the genesis of Highland I and Highland II.

The megaregolith (subsurface) Mare I, II, and III Provinces are defined on the basis of increasing iron weight percentage values. These increasing values are the result of basalt flows that have predominantly contributed to the megaregolith in maria regions. The data suggest a decline of iron (FeO) and titanium (TiO₂) values with depth and then an increase in iron values at greatest observable depths. This may indicate discrete sources and localised fissures for the bulk of mafic material containing these elements, with the basalts flowing over anorthositic bedrock from underlying deep mafic crust.

The high mafic content of the megaregolith of the South Pole Aitken basin Provinces I and II suggests an origin from very deep (mafic) crust or upper mantle material (Lucey et al., 1998A), and basalt flows (Pieters et al., 2001). The megaregolith in this region may simply be a pulverised form of highly mafic material. The plots of South Pole Aitken basin iron and titanium variation with crater size seem to indicate predominantly vertical homogeneity.

Iron appears to be a clearer diagnostic than titanium for determining the origin of the megaregolith, as it is more widespread and can be used to define mafic material related to the deeper crust and possibly the upper mantle. Titanium seems to be almost entirely sourced from titanium-rich basalts.

The following are factors that might be responsible for the variations in megaregolith thickness from place to place: (1) the degree of impact excavation early in the Moon's history, (2) the amount of material available from the rubble of the impacts, (3) how much basalt / mafic magma may have intruded into the crust and contributed to it, and (4) the thickness of the original crust.

5.3 Lunar Evolution

An interpretation of the sequence of events derived from Figures 3-27, 3-29, and 4-1 is as follows:

The Moon is thought to have formed through a collision process between a Mars-sized impactor and the proto-Earth. The formation scenario has been discussed by Hartmann and Davis (1975), Cameron and Ward (1976), Kipp and Melosh (1986) and Cameron and Canup (1998), and others. Collision debris remained hot, the Moon coalesced and initially formed a magma ocean, followed by differentiation of material. Depending on whether the Moon was partly or completely melted, two different internal models are required, as illustrated in Figure 1-2.

The Moon's crust is known to be thicker on the farside (Kaula et al., 1974) and by astrogeological studies to be thinner on the near side (Eggleton, 1965). Petrological studies and geochemical analysis by Ryder and Wood (1977) supports this. This may be due to convection currents occurring in the mantle while the Moon was still molten. In this scenario, cooling at the surface of the magma ocean formed "rockbergs" of anorthosite (Hartmann 1980). Convection currents in the mantle would then transport the anorthosite along the surface of the magma ocean. Because the centre of gravity of an at least partially molten Moon would be displaced towards Earth (Figure 1-3 and Taylor 1999), these pieces of anorthosite would preferentially be swept to the lunar farside, making its crust thicker than that of the nearside.

The lunar magma ocean phase is thought to have been accompanied and followed by extensive and intense bombardment by material left over from the

formation of the Solar System and the Earth-Moon system. This resulted in the early Moon's surface being extensively cratered over its entire globe. The megaregolith of anorthosite (Highland I) formed during this period, as did the Nectaris and South Pole Aitken basins. Subsequently, other major basins formed, the youngest being Imbrium and Orientale. These impact basins were later filled by basalt flows and, if the Intrusion model is correct, basalts or mafic magma intruded into the megaregolith in the form of sills and dykes in the regions surrounding the impact basins, forming megaregolith Highland Province II material. This left the Moon much as we see it today.

The Imbrium basin formed in the period 3.2 to 3.85 billion years ago (see Figure 1-5) (Wilhelms, 1984, and 1987; Heiken et al., 1991, p. 610). Dasch et al. (1987) give estimates of K.R.E.E.P. basalts ages at ca. 3.95 to 4.24 billion years based on analysis of Apollo 14 samples and this, therefore, indicates that there was pre-Imbrium K.R.E.E.P. volcanism. The mare K.R.E.E.P. basalt in the Imbrium region of today may have been produced by basalt flowing through zones of K.R.E.E.P. enrichment in the upper mantle. The K.R.E.E.P. material, being a residual immiscible liquid (Taylor, 1992, p333) is displaced, as it does not mix with the crystal structure of olivine and clinopyroxene material in the middle and lower mantle. The molten basalt mixed with the K.R.E.E.P. to extrude onto the surface. These zones of upper mantle K.R.E.E.P. enrichment may have been thicker in some places than elsewhere and are even missing in some locations by the evidence that some regions only have titanium-poor basalt flows such as Western Oceanus Procellarum. This K.R.E.E.P. material was the source of relatively thorium-rich K.R.E.E.P. in line with Lunar Prospector results (Laurence et al., 1998 and 1999). After the Imbrium event, titanium-rich basalts flowed to cover the depression that formed as a result of the Imbrium impact and subsequently flowed into eastern maria, and to the West into eastern, central, and south-eastern Oceanus Procellarum, to cover previous flows of titanium-poor basalt (Jackson 2001, 2003A; Burroughs and Spudis 2001).

Formation of the far-side Moscoviense basin occurred early in the Moon's geological history. This basin is of pre-Nectarian to Nectarian age (Spudis, 1993). Orientale formed at a much later date in the Moon's history, and is approximately Imbrium in age (Spudis, 1993). The Oriental and Imbrium impacts subsequently allowed basalt to flow into their immediate vicinity, over relatively thick anorthosite megaregolith and bedrock (Solomon and Head 1980). In these areas, the basalt / mafic magma intruded into fractures and voids in the anorthositic megaregolith, to form the Highland II Province megaregolith. The data seem to indicate that the basalt coverage in Orientale and Moscoviense is relatively thin, as judged by the penetration levels of the crater excavations in those maria, when compared with the basalt thickness of Oceanus Procellarum (Jackson 2001, 2003B).

5.4 Comparison between the new Lunar Province Maps and previous maps based on other criteria

The new lunar megaregolith Iron Province Map (Figure 3-27) and the new lunar megaregolith Titanium Province Map (Figure 3-29) represent subsurface mapping. This differs from the lunar topographical maps of the USGS and the lunar geographical / geomorphological / petrological province map of Jolliff et al. (2000). Similarly, Figures 3-27 and 3-29 differ from maps that relied only on the surface

spectral signature (Elphic et al., 1998; and Lawrence 1998) and surface geomorphology, general geographical division or a combination of these approaches. The new province maps (Figures 3-27 and 3-29) are based on iron (FeO) and titanium (TiO₂) distributions within the lunar megaregolith (see Figures 1-9, 1-10, and 4-7) beneath the surface regolith layer. The new province maps for iron and titanium do not contradict the past mapping work of, for example, Jolliff et al., 2000, as the criterion for this study is totally different and therefore extends current knowledge. The new megaregolith province maps provide a new dimension to viewing the Moon. The new maps provide a subsurface view on a global scale not previously available, for a fuller picture of the Moon and a guide to the geological development of its crust.

5.5 What the new maps tell us about the Moon, its processes and history

The new Iron Province Map, Figure 3-27, reveals a number of complex major phases and subsequent related phases in the Moon's crustal development. The maps indicate earlier global bombardment of meteoritic material forming craters that generated a megaregolith layer (see Figure 1-9) and later the formation of the basins. This megaregolith surrounding basin sites was, according to the "Intrusion Model", subsequently intruded by basaltic or mafic magma (in the form of sills and dykes). If this is correct then this gave rise to both the titanium-poor intrusions of the low-medium iron Highland II Province and later titanium-rich intrusions in certain regions to provide the Titanium II Province (see Figures 3-27, 3-29, 4-2, and 4-3).

The new maps indicate that there was a greater volume of titanium-poor basalts when compared with titanium-rich in the "Intrusion" model to provide the various provinces. The "Thrust Block" model might also explain the iron subsurface distribution but does not explain the areas in highland terrane such as areas around Crater 846 (15.6 N, 96.2 W) and Crater 1061 (50.5 N, 96.2 W) that are basaltic by their high iron readings and high titanium readings. While Crater 1061 (see Table 3-1) is located on a large peninsular of anorthositic Highland material, Crater 864 is surrounded by extensive Highland material.

The restricted flow of the titanium-rich basalt in the Intrusion Model may also indicate that the titanium-poor basalts flowed earlier and filled the majority of available spaces and voids in the megaregolith, thereby restricting any intrusion by later titanium-rich basalts. Alternatively, it may be that there were insufficient volumes of titanium-rich basalts to flow as extensively as the titanium-poor basalts. Yet another possibility was the magma that intruded the Highland was more buoyant than other magma types, as described by Wieczorek et al. (2001). Figures 3-27 and 3-29 also indicate that Orientale and Mare Moscovense have relatively thin layers of basalt when compared with other maria since the data indicate that they are underlain by Highland II and Titanium II Province megaregolith material.

These new maps, especially the Iron Province Map, also provide additional constraints to the extent to which, for example, the Imbrium impact could have contributed to the megaregolith (Haskin 1998). This is because there appear to be significant gaps in the spread of iron values (Figure 3-27) as described previously in this work, not only in the megaregolith around the basins but over the globe of the

Moon. Any contribution by the Imbrium impact ejecta to the surface of the Moon cannot be seen in the megaregolith data set, and if any exists, it must be covered by basalt flows in and near the maria.

The new megaregolith province maps clearly indicate that the Moon, both in terms of its processes and history, is considerably more complex than previous studies have indicated.

5.6 Future Work

5.6.1 Work remaining to be done

The mapping of global megaregolith of other elemental abundances, such as thorium, uranium, copper, aluminium, zinc, other metals, and sulphur to mention a few, needs to be undertaken to provide a more complete view. However, pixel definition size would need to be at a maximum of 200 metres to be able to compare data sets. While Prospector data may be useful for a broad view of the range of elemental abundances (Elphic et al., 1998; Gillis et al., 2003, Laurence et al., 1998 and 1999), a smaller pixel size than that which Lunar Prospector can provide is required. Lunar Prospector pixel size is about 2 degrees Latitude by 2 degrees Longitude or around 60 kilometres by 60 kilometres.

The next phase for future work for this study is the extraction of a data set for Thorium parts per million abundances and be able to convert that to weight percentage abundances for the more than 2,000 crater ejecta from 60 North to 60 South and the investigation of how this relates to crater diameter, depth and iron (FeO) and titanium (TiO₂) distribution. This could help differentiate different compositional populations in the megaregolith.

Other elements could similarly be mapped once suitable data of a small enough pixel size are available. Craters in Table 3-1 represent another matter that would warrant future investigation, as it may provide support for the Intrusion Model or may indicate some, as yet, not understood process.

5.7 Methodology for future work

Future work would rely upon the same methodologies as outlined in this study using ISIS and the Gillis data set (Gillis et al., 2003), although the Gillis data set has a pixel size of 2 degrees by 2 degrees that would make it too large for megaregolith studies. Nevertheless, it might prove interesting for initial comparison of thorium global surface signature with iron and titanium megaregolith in a G.I.S. (Geographical Information System). Another thorium data set with smaller pixel sizes may be available within the next few years from European, Japanese, and US lunar probes. Use of the Prospector Gamma ray data set might also prove useful to review titanium (TiO₂) data, although it too has a very large pixel size. G.I.S. software such as ArcGIS 8.3 or a similar product could display the results in mapping overlays to see what relationships may exist between thorium, iron, and titanium. This approach could also be undertaken for other elements, as suitable data sets become available, using the groundwork already laid out in this study.

5.8 Possible Applications

Clearly, the new province maps provide a different approach to studying the Moon. The new Iron Province Map (Figure 3-27) and the new Titanium Province Map (Figure 3-29) and work by Elphic et al. (1998) and Lawrence et al. (1998) seem to indicate that the Mare Imbrium in particular, Oceanus Procellarum, and possibly Mare Tranquillitatis have high levels of iron and titanium. This might warrant further investigation for possible regions of mineralisation that may provide some economic basis and cost reduction by supplying material for construction of any proposed future Moon bases and beyond. This is based on studies of elemental concentrations in the megaregolith and the elemental concentrations on the surface of the lunar crust. Such future bases may possibly use lunar materials from the megaregolith to construct spacecraft and other necessities to live on the Moon, and continue planetary exploration and research using smaller amounts of fuel to launch vehicles because of the Moon's lower gravity. The Maturity Index (Lucey et al., 1998C) that is a measure of the exposure of the lunar surface to the Solar wind. The more mature the surface the longer the exposure and the more hydrogen and helium-3 that the regolith can possibly capture within the crystal lattice of the constituent rocks. Understanding the Maturity Index from place to place is important for the resources aspect for "living off the land" as this means more implanted hydrogen for water production and $^3\text{helium}$ for proposed fusion reactors. This would provide a cost saving for such a venture of establishing and maintaining a Moon Base.

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Appendix A Formation of the Moon

The Solar System is believed to have formed from a nebula of gas and dust that condensed to a major central mass (the proto Sun), with an accretion disc orbiting it. The accretion disc coalesced to form various orbiting bodies including the proto-planets. Such accretion discs have formed around other stars that can be currently observed (Taylor, 2001). These various coalescing bodies, because of intersecting or erratic orbits collided and are absorbed or shatter and reform, reshaping themselves to form the Solar System of today (Taylor, 2001).

Hartmann and Davis (1975), and Cameron and Ward (1976) proposed the hypothesis that a Mars size body collided with the proto-Earth that resulted in a rebound of material into Space. In this model, this action created a larger and smaller body that eventually formed the Earth–Moon system, as we know it today. It was not until 1986 when Kipp and Melosh (Figure 1-1) were able to demonstrate the feasibility of this concept that the hypothesis gained wide acceptance. The Earth-Moon system formed about 4.5 billion years ago (Taylor, 1999).

Appendix B Image Maps of the Moon

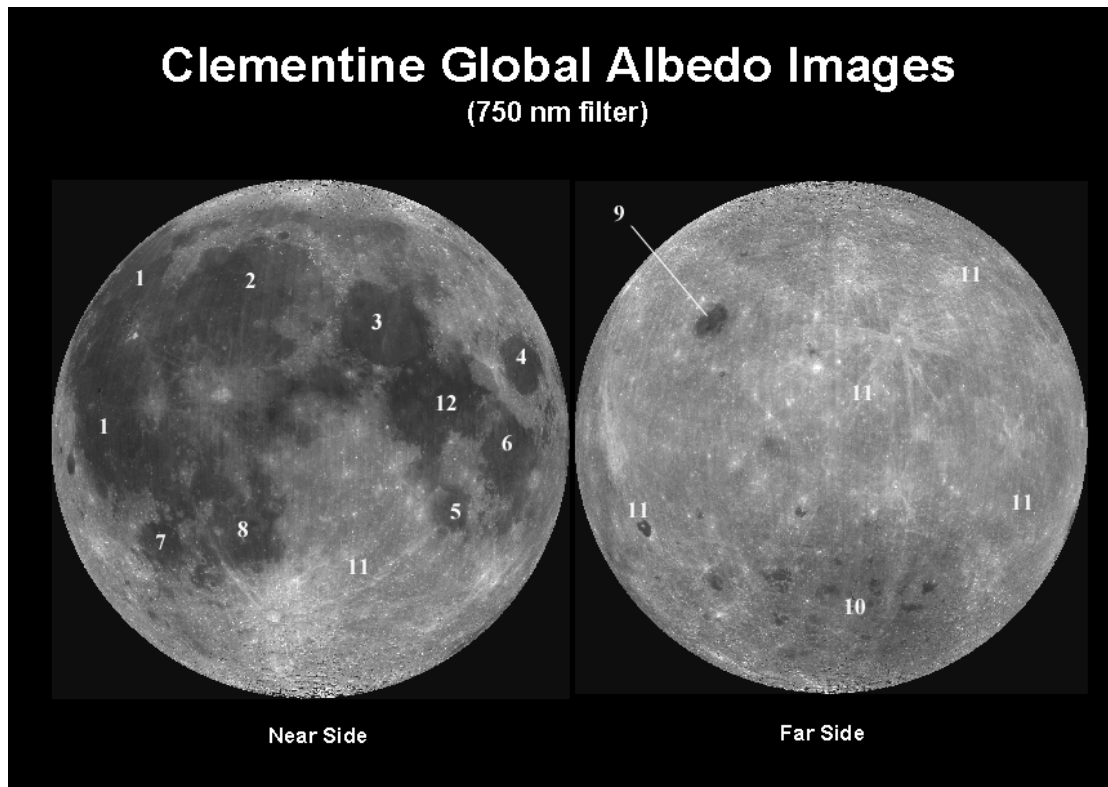


Figure B 1 Map A. An Albedo image of the Moon using the 750nm mosaic from the Clementine of 1994 (Lunar and Planetary Institute Houston, Texas, USA. www.lpi.usra/clemen/albedo.gif). The numbers represent the following features on the Moon's surface.

- 1 = Oceanus Procellarum
- 2 = Mare Imbrium
- 3 = Mare Serenitatis
- 4 = Mare Crisium
- 5 = Mare Nectaris
- 6 = Mare Fecunditatis
- 7 = Mare Humorum
- 8 = Mare Nubium
- 9 = Mare Moscoviense
- 10 = South Pole Aitken Basin
- 11 = Highland Terrane
- 12 = Mare Tranquillitatis

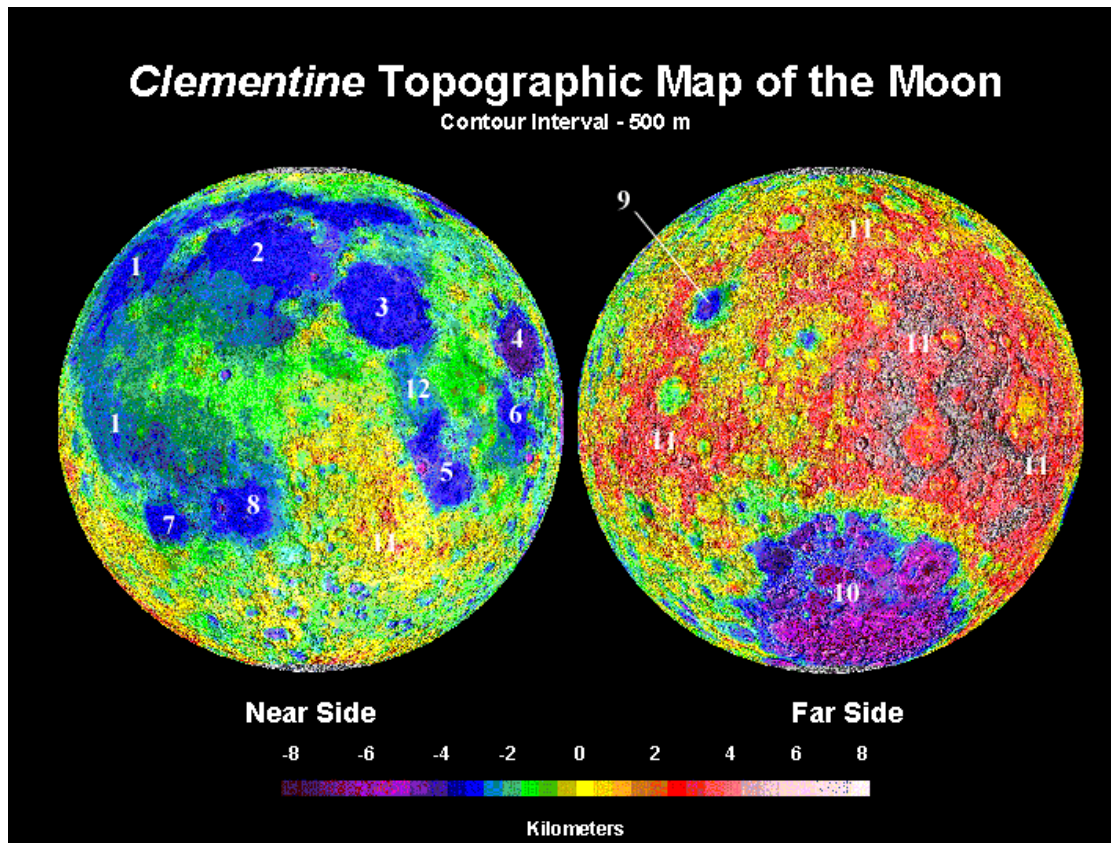


Figure B 2 Topographic map derived from Clementine data (Lunar and Planetary Institute Houston Texas USA Website (www.lpi.usra/clemen/nfttopo.gif)). The numbers represent the following features on the Moon's surface.

- 1 = Oceanus Procellarum
- 2 = Mare Imbrium
- 3 = Mare Serenitatis
- 4 = Mare Crisium
- 5 = Mare Nectaris
- 6 = Mare Fecunditatis
- 7 = Mare Humorum
- 8 = Mare Nubium
- 9 = Mare Moscoviense
- 10 = South Pole Aitken Basin
- 11 = Highland Terrane
- 12 = Mare Tranquillitatis

Crater Number, Crater name, Co-ordinates, Diameter, Iron and Titanium Distribution by Weight % in Crater Ejecta.

Author: Noel W. Jackson									
Crater	Crater	Co-ordinates		Crater	Lunar Crater Ejecta Weight % approx.		Terrane Type		
Number	Name	Latitude	Longitude	Diameter (km)	Iron	Titanium	Highland	Mare	South Pole Aitken Basin
1	Treisneker	4.1	3.6	26	10.5	1.5		X	
					9.5	1.7			
					9	1.1			
					9.8	1.5			
					9.8	1.3			
					8.2	1.2			
					9.3	1.1			
					9.6	1.5			
					10.5	1.5			
					9.9	1.7			
					10.8	1.3			
					10.3	1.2			
				Average	9.76666667	1.383333333			
				Standard Deviation	0.695621225	0.212488859			
2	Chladni	4.0	1.2	12	10.3	1.7		X	
					11.4	2.2			
					10.5	1.9			
					10.4	1.7			
					9.9	1.7			
					9.6	1.9			
					9.6	1.7			
					9.3	1.1			
					9.8	1.2			
					10.6	1.3			
					11.1	1.3			
					9.8	1.6			
				Average	10.19166667	1.608333333			
				Standard Deviation	0.657405368	0.326018218			

3	Ukert	7.7	1.4	23		9.4	1.5	X		
						9.4	1.3			
						9.3	1.4			
						8.7	1.4			
						9.9	1.8			
						9.6	2.1			
						10.1	1.8			
						9.3	1.7			
						9.9	1.6			
						10.5	1.6			
						9.3	1.1			
						7.9	1.7			
					Average	9.441666667	1.583333333			
					Standard Deviation	0.673469083	0.26571801			
4	Dembowski	1.7	5.2	10.7		8.1	0.8	X		
						7.4	0.8			
						7.6	0.9			
						8	0.8			
						9.3	0.8			
						8.1	0.8			
						7.5	0.7			
						8	0.9			
						7.9	1			
						8.2	0.8			
						7.8	1			
						8.8	0.8			
					Average	8.058333333	0.841666667			
					Standard Deviation	0.506862004	0.090033664			
5		1.6	6.9	6		5.1	0.5	X		
						4.6	0.5			
						4.5	0.5			
						6.2	0.7			
						6.2	0.8			
						5.3	0.5			

						3.2	0.3			
						4.8	0.5			
						4.2	0.6			
						5.4	0.6			
						4.1	0.6			
						4.7	0.7			
					Average	4.858333333	0.566666667			
					Standard Deviation	0.859659905	0.130267789			
6		6.3	5.7	8		9.2	1.1		X	
						10.2	1.6			
						10.1	1.8			
						10.5	2			
						10.2	1.7			
						11.4	1.8			
						9.8	1.3			
						9.9	1.8			
						7.7	1.7			
						9.7	1.7			
						10.9	1.4			
						10.6	2			
					Average	10.01666667	1.658333333			
					Standard Deviation	0.931112075	0.271220586			
7	Manilus	14.4	9.2	37.4		6.6	1.1		X	
						8	1.2			
						7.6	1			
						7	1.4			
						7.3	1.7			
						7.6	1.8			
						8.7	2.3			
						9.9	2.2			
						10.1	2.2			
						7.7	1.9			
						6.8	1.6			
						7.8	1.2			

				Average	7.925	1.633333333			
				Standard Deviation	1.119354522	0.457926817			
8	Connor	21.5	1.9	20	9.8	1	X		
					10	1			
					9.8	0.8			
					5.6	0.5			
					4.8	0.4			
					5.5	0.7			
					7.2	0.5			
					5.9	0.5			
					4.9	0.5			
					5.3	0.4			
					5.5	0.4			
					7.9	0.7			
				Average	6.85	0.616666667			
				Standard Deviation	2.024172109	0.220879784			
9	Autolycus	30.7	1.5	36.6	12.4	1.9	X		
					12.6	2			
					11.6	2			
					12	1.7			
					11.4	2.4			
					12.1	2.4			
					12.5	2.1			
					11.2	1.7			
					11.1	1.1			
					12.7	1.3			
					12.1	1.6			
					11.6	2			
				Average	11.94166667	1.85			
				Standard Deviation	0.553432813	0.394277244			
10	Theaeretus	36.9	6.1	23.8	10.5	1.8	X		
					11	1.5			
					9.5	1.6			

						11	1.4			
						11.1	1.1			
						11.3	1.8			
						10.5	1.3			
						10.7	2			
						10	1.5			
						12.4	2			
						13.2	2.6			
						10.7	1.9			
					Average	10.99166667	1.708333333			
					Standard Deviation	0.992204463	0.398767039			
11		41.6	7.9	11.6		8.5	0.5		X	
						5.2	0.3			
						7.9	0.5			
						6.5	0.4			
borderline case Mare _Highland terrain						7.2	0.5			
						7.4	0.7			
						7.9	0.4			
						8.2	0.7			
						6.5	0.4			
						6.9	0.6			
						8.6	0.6			
						6.3	0.4			
					Average	7.258333333	0.5			
					Standard Deviation	1.022882143	0.12792043			
12		40.3	4.9	14		6.6	0.7		X	
						6.9	1.1			
						8.1	1.1			
						9.3	1.2			
						10.3	1			
						10.1	1.1			
						10.2	0.9			
						9.3	0.9			
						12.1	1			

15		51.3	11.2	7.8		9.9	0.8		X	
						10.2	0.7			
						11.5	1.2			
						12.6	1.3			
						11	0.9			
						10.5	0.8			
						11.4	0.9			
						13	1			
						11.4	1.1			
						9.4	0.7			
						11.1	0.9			
						11.2	1.1			
					Average	11.20909091	0.95			
					Standard Deviation	1.007426966	0.19306146			
16		64.7	7.8	14.5		5.4	0.3			
						5.3	0.4	X		
						6.6	0.4			
						7.4	0.5			
						6.5	0.4			
						9	0.8			
						9.1	0.9			
						8.5	0.6			
						9.2	0.5			
						7.5	0.7			
						8	0.7			
						8.7	0.5			
					Average	7.6	0.558333333			
					Standard Deviation	1.392838828	0.183195541			
17		60.8	16.2	10.2		10	0.8	X		
						10.4	1			
						6.4	0.4			
						4.5	0.2			
						4.5	0.3			
						7.6	0.3			

						11.2	0.9			
						6.1	0.3			
						4.9	0.3			
						11.1	1.1			
						6.2	0.3			
						5	0.2			
					Average	7.325	0.508333333			
					Standard Deviation	2.642700066	0.336987546			
18	C Mayer	62.9	17.4	36.9		10.2	1	X		
						7.3	0.3			
						7.9	0.6			
						10.7	0.7			
						5.4	0.2			
						8.4	0.6			
						1.3	0.2			
						6.2	0.4			
						9.1	0.4			
						2.9	0.2			
						5.6	0.4			
						4.5	0.2			
					Average	6.625	0.433333333			
					Standard Deviation	2.863921342	0.249848439			
19	Sheepshanks	58.9	17.2	22.1		13.2	0.9	X		
						9.7	0.5			
						9	0.5			
						9.8	0.6			
						8.6	0.5			
						8.1	0.6			
						6.4	0.4			
						7.6	0.3			
						10.4	0.6			
						10.3	0.6			
						8.3	0.5			
						10.4	0.7			

				Average	9.316666667	0.558333333			
				Standard Deviation	1.741385725	0.150504203			
20		56.7	18.3	10.3	9.3	0.6	X		
					10	0.6			
					10	0.5			
					8.6	0.5			
					8.9	0.7			
					10.1	0.7			
					9	1			
					9.1	0.6			
					11	0.6			
					11.2	0.7			
					9.3	0.7			
					10.3	0.9			
				Average	9.733333333	0.675			
				Standard Deviation	0.833757468	0.148477118			
21		45.6	20.1	11.9	7.1	0.6	X		
					8.2	0.4			
					10.9	0.8			
					9.6	0.7			
					9.4	0.7			
					7.5	0.4			
					5	0.4			
					6.3	0.5			
					6.6	0.4			
					7.3	0.7			
					9.1	0.1			
					9.9	0.5			
				Average	8.075	0.516666667			
				Standard Deviation	1.735262621	0.194624736			
22	Isamech ??	42.5	13.6	12.5	7.1	1.2	X		
					6.6	0.6			
					5.4	0.3			

						3.4	0.5			
						5.1	0.5			
						4.2	0.6			
						3.5	0.7			
						5.7	0.7			
						5.9	0.5			
						2.1	0.4			
						1.9	0.4			
						4.2	0.3			
					Average	4.59166667	0.558333333			
					Standard Deviation	1.666492415	0.242930343			
23	Calippus	38.6	10.8	33.5		5.7	0.6	X		
						4.8	0.4			
						4	0.4			
						7.2	0.7			
						10.2	1			
						4.7	0.6			
						9.5	0.8			
						1.8	0.5			
						7.1	0.6			
						6.5	1			
						4.1	0.4			
						5.9	0.8			
					Average	5.958333333	0.65			
					Standard Deviation	2.359683466	0.215322169			
24	Bessel	21.7	17.9	15		16.4	4.5	X		
						15.8	4.9			
						15.4	2.7			
						16.4	4.6			
						15.7	4.7			
						16.4	4.8			
						16.2	3.6			
						16.8	5.6			
						16.7	4.8			

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27	Sosigeres	8.7	17.6	15.9		16.5	9.2		X	
						16.2	8.4			
						16.7	9.5			
						16.9	9.4			
						15.6	6.8			
						15.8	6.9			
						15.9	7.6			
						16.5	7.1			
						16	7.7			
						16.9	9.2			
						17	8.4			
						15.8	9.1			
					Average	16.31666667	8.275			
					Standard Deviation	0.495127777	1.019023597			
28	Dionysius	2.7	17.3	15.9		7.8	2.8		X	
						8.3	3.1			
						8.4	2.2			
						12.4	5.5			
						5.6	1.1			
						6.8	1.6			
						7.9	1.9			
						7.8	1.9			
						7.7	1.7			
						6.4	1.5			
						7.4	1.4			
						8.1	1.6			
					Average	7.883333333	2.191666667			
					Standard Deviation	1.644734482	1.188932549			
29	Silberschlag	6.1	12.5	11.7		9.1	1.5		X	
						8.3	1.4			
						7.8	1.3			
						7.3	1.1			
						7.6	1.2			
						7.2	1.1			

						6.1	1.1			
						7.1	1.4			
						7.4	1.5			
						9.1	1.7			
						8.5	1.5			
						5.7	1.2			
					Average	7.6	1.333333333			
					Standard Deviation	1.054858888	0.196946386			
30	Maskelyne	2.1	29.9	22.7		15.3	4.8		X	
						15.5	5.6			
						14.8	4.9			
						15.4	6.2			
						16.6	7.2			
						16.7	6.8			
						16.9	7.9			
						16.6	7.6			
						16.8	8.1			
						16.2	7.1			
						16.1	6.3			
						16.3	6.4			
					Average	16.1	6.575			
					Standard Deviation	0.688872597	1.087219138			
31	Argo	10.7	26.6	16.2		17.5	7.2		X	
						17.5	7.7			
						17.2	6.8			
						17.5	7.9			
						17.3	8.6			
						17.6	8.3			
						17.2	8.1			
						17.9	9.4			
						17.7	8			
						17.4	7.2			
						17.2	7.4			
						17.5	9			

				Average	17.45833333	7.966666667			
				Standard Deviation	0.21514618	0.773813853			
32	Plinius	15.3	22.5	39.5	15.7	6.2	X		
					17.8	8.1			
					17.6	7.9			
					17.3	9.2			
					14.9	6.2			
					17.3	9.6			
					12.8	5.2			
					14.7	6.5			
					15.2	7.1			
					9.5	2.6			
					17.3	9			
					17.1	6.7			
				Average	15.6	7.025			
				Standard Deviation	2.454680131	1.950349619			
33	Dawes	17.2	26.3	18.4	18.4	13.1	X		
					18.3	10.4			
					18.3	11.6			
					17.6	6.7			
					17.6	7.7			
					17.2	5.8			
					17.5	7.3			
					18	9.4			
					18.4	13.2			
					18.4	14.2			
					17.6	9.4			
					18.2	13.4			
				Average	17.95833333	10.18333333			
				Standard Deviation	0.431610795	2.910742902			
34	Vitruvius	17.6	31.6	28.1	12.9	3.8	X		
					13	3.5			
s cut in to a small section of Highland)					15.7	5.8			

						16.2	6.2			
						16.8	6.6			
						17	5.4			
						17	4.6			
						15.5	3.9			
						15.4	5.3			
						11.3	2.3			
						11	2.3			
						8.9	2.6			
					Average	14.225	4.358333333			
					Standard Deviation	2.725010425	1.518047989			
35	Gardiner	17.6	31.0	17.9		10.7	1.8		X	
						9	1.5			
						11.3	2.3			
						13.7	2.3			
						15.1	2.6			
						15.3	2.6			
						14.9	2.6			
						13.6	2.9			
						15	3.9			
						14.1	3.3			
						14.3	2.2			
						14.3	2			
					Average	13.44166667	2.5			
					Standard Deviation	2.013345625	0.653661019			
36	Littrow	21.1	31.6	26.5		10.2	1.9		X	
						9.5	2.6			
						11.4	2.3			
						13.8	4.9			
						9.2	3.8			
						7.6	3.7			
						10.4	4.3			
						10.4	2.6			
						11.4	2.7			

39	Franck	23.3	34.7	9.1		10.9	0.9		X	
						11	0.6			
						11.7	1.4			
						12.2	1			
						12.4	1.6			
						9.4	1.4			
						12.1	1.3			
						10.9	1.1			
						10.8	0.9			
						11.8	1.2			
						10.1	1			
						12.2	1.6			
					Average	11.29166667	1.166666667			
					Standard Deviation	0.933671476	0.305505046			
40	Romer	25.3	36.3	39.1		6.2	0.4		X	
						4.9	0.3			
						5.7	0.5			
						7.3	0.4			
						8.5	0.7			
						5.3	0.3			
						5.8	0.4			
						6.2	0.6			
						5.1	0.4			
						6.2	0.5			
						4.2	0.3			
						5.4	0.4			
					Average	5.9	0.433333333			
					Standard Deviation	1.135381394	0.123091491			
41	S. Bond	32.3	36.6	18.5		1.5	0.5		X	
						7	0.6			
						6.4	0.5			
						5.4	0.5			
						5.5	0.7			
						5.6	0.7			

						3.6	0.4			
						5.2	0.4			
						7.5	0.5			
						7.7	0.7			
						6.6	0.8			
						5.3	0.7			
					Average	5.608333333	0.583333333			
					Standard Deviation	1.724928633	0.133711585			
42		35.9	41.8	20		5.3	0.5	X		
						5	0.3			
						4.8	0.4			
						7.6	0.3			
						8.7	0.5			
						5.4	0.5			
						8.3	0.5			
						6.7	0.4			
						5.2	0.4			
						4.5	0.3			
						5.3	0.3			
						5.7	0.5			
					Average	6.041666667	0.408333333			
					Standard Deviation	1.426029665	0.090033664			
43		33.6	30.7	19.5		7.6	0.7	X		
						10	0.7			
						9.7	1			
						9.6	0.7			
						9	0.9			
						9.8	0.9			
						9.2	1			
						10	1			
						10.2	0.7			
						10.1	1			
						9	1			
						9	0.8			

				Average	9.433333333	0.866666667			
				Standard Deviation	0.731540508	0.137068883			
44	33.5	27.6	12.1		14.6	3.8	X		
					14.1	2.9			
					11.8	1.9			
					17.1	3.1			
					14.1	2			
					15.5	2.4			
					15.4	3.1			
					12.6	3.1			
					13.5	2.4			
					13.7	3.2			
					14	2.3			
					10.7	1.7			
				Average	13.925	2.658333333			
				Standard Deviation	1.709930886	0.634548276			
45	31.6	29.5	11.5		6.3	0.7	X		
					7.7	0.7			
					7.9	0.8			
					7.6	0.7			
					6.7	0.6			
					6.3	0.8			
					3.3	0.4			
					6.1	0.6			
					7.1	0.6			
					6.9	0.7			
					6.5	0.9			
					5.9	0.8			
				Average	6.525	0.691666667			
				Standard Deviation	1.206139597	0.131137217			
46	33.1	24.2	10.1		16	3.8	X		
					15.5	3.4			
					15.9	3.6			

						15.1	2.7			
						15.7	3.2			
						15.8	3.5			
						15.6	3.3			
						15.9	3.3			
						15.9	3.4			
						16.2	2.3			
						16.8	4.5			
						15.8	4.1			
					Average	15.85	3.425			
					Standard Deviation	0.407876987	0.577022136			
47	Maury	30.7	39.6	16.7		3.7	0.3	X		
						4.4	0.3			
						5.8	0.4			
						6.3	0.4			
						5.9	0.5			
						7.4	0.4			
						7.5	0.4			
						9.5	1.1			
						7.5	0.8			
						6.4	0.4			
						5.2	0.5			
						2.6	0.4			
					Average	6.016666667	0.491666667			
					Standard Deviation	1.884305193	0.231431644			
48	Grove	40.2	33.0	27.2		7.3	0.6	X		
						8.3	0.5			
						8.1	0.7			
						8	0.6			
						5.3	0.6			
						9.4	0.7			
						8	0.8			
						6.6	0.5			
						9.9	0.5			

51		46.7	33.0	12		8.9	0.6		X	
						6.3	0.3			
						9.1	0.6			
						8.3	0.4			
						9.2	0.5			
						9.2	0.4			
						10.4	0.8			
						10.6	0.3			
						10.5	0.7			
						8.6	0.6			
						6.1	0.5			
						9.2	0.9			
					Average	8.86666667	0.55			
					Standard Deviation	1.447463822	0.188293774			
52	Galle	55.7	22.5	21.1		13.2	1		X	
						11.8	0.7			
						10.6	0.8			
						10.2	0.6			
						10.8	0.6			
						10.1	0.5			
						9.9	0.6			
						8	0.4			
						11	0.8			
						11.8	0.8			
						12	0.9			
						12.8	0.8			
					Average	11.01666667	0.708333333			
					Standard Deviation	1.421160431	0.172986249			
53		57.6	24.6	11.1		10.2	0.8		X	
						10.1	0.9			
						9.5	0.8			
						8.6	1.1			
						5.5	0.4			
						7.2	0.4			

						8.4	0.6			
						9.8	0.5			
						11.4	1			
						10.6	0.5			
						9.2	1.5			
						11.5	1.2			
					Average	9.333333333	0.808333333			
					Standard Deviation	1.727495998	0.347610894			
54		64.5	29.7	16		6.1	0.7	X		
						6	0.8			
						2.3	0.2			
						1	0.2			
						6.6	0.5			
						5.2	0.5			
						6.2	0.3			
						10.1	0.8			
						13.2	3.5			
						16.8	4.7			
						11.8	1.7			
						7.6	0.5			
					Average	7.741666667	1.2			
					Standard Deviation	4.520952903	1.434636476			
55	Democratus	62.1	35.0	36.6		9.6	0.7	X		
						3.9	0.3			
						10.5	0.6			
						4.6	0.3			
						5.1	0.3			
						3	0.3			
						4.5	0.3			
						3.8	0.1			
						5.2	0.3			
						3.9	0.2			
						5.6	0.3			
						6.2	0.4			

				Average	5.491666667	0.341666667			
				Standard Deviation	2.308662869	0.162135372			
56	67.3	35.2	10.7		8.4	0.6	X		
					7.7	0.5			
					6.7	0.5			
					2.7	0.2			
					3.7	0.2			
					3.7	0.3			
					2.6	0.3			
					5.8	0.1			
					5.4	0.3			
					8.3	0.6			
					8.8	0.4			
					7.4	0.7			
				Average	5.933333333	0.391666667			
				Standard Deviation	2.288442636	0.188092498			
57	57.3	30.3	12.5		11.2	0.8	X		
					11.3	0.8			
					11.8	0.8			
					10	0.9			
					7.9	0.6			
					6.7	0.4			
					8.6	0.6			
					6.2	0.4			
					7.6	0.4			
					8.4	0.7			
					8	0.5			
					10.1	0.9			
				Average	8.983333333	0.65			
				Standard Deviation	1.858559233	0.19306146			
58	65.2	41.9	14.2		7.2	0.3	X		
					10.8	1.2			
					12.2	1.6			

						1.4	0.2			
						3.1	0.3			
						2.2	0.1			
						0.1	0.1			
						2.5	0.2			
						2.8	0.2			
						6.2	0.5			
						6.3	0.7			
						7.2	0.4			
					Average	5.16666667	0.48333333			
					Standard Deviation	3.783536905	0.468718433			
59		58.4	40.9	11.8		7.3	0.4	X		
						8.2	0.6			
						6.5	0.5			
						3.8	0.3			
						2.7	0.2			
						2.4	0.2			
						3	0.1			
						4.1	0.2			
						7.1	0.6			
						8.2	0.5			
						8.2	0.6			
						4.8	0.3			
					Average	5.525	0.375			
					Standard Deviation	2.290345349	0.181533869			
60		61.5	45.5	10.3		3.7	0.2	X		
						6.1	0.3			
						2.3	0.1			
						3	0.1			
						2.8	0.1			
						0.9	0.1			
						1.8	0.2			
						2.8	0.1			
						2.5	0.1			

63		51.2	43.6	31.8		8.2	0.4	X		
						6.3	0.4			
						7.1	0.5			
						6.8	0.6			
						6	0.6			
						4.8	0.3			
						3.2	0.3			
						5.1	0.4			
						6.8	0.5			
						9.2	0.7			
						5.8	0.4			
						5.6	0.4			
					Average	6.241666667	0.458333333			
					Standard Deviation	1.57391136	0.124011241			
64		45.1	49.4	21.1		8.9	0.8	X		
						9.1	0.6			
						6.8	0.6			
						7.1	0.7			
						4.4	0.4			
						4.6	0.3			
						4.7	0.3			
						3.4	0.2			
						6.3	0.2			
						6.9	0.5			
						7.8	0.5			
						6.1	0.6			
					Average	6.341666667	0.475			
					Standard Deviation	1.798715872	0.195982374			
65		30.5	47.2	14.7		3.1	0.3	X		
						5.6	0.9			
						4.6	0.4			
						2.8	0.3			
						1.3	0.2			
						2.6	0.3			

						3.7	0.6			
						2.9	0.3			
						0.7	0.1			
						0.5	0.2			
						2.3	0.2			
						2.3	0.3			
					Average	2.7	0.341666667			
					Standard Deviation	1.488134891	0.21514618			
66		32.9	46.0	11.6		6	0.5	X		
						3	0.5			
						3.5	0.4			
						3	0.4			
						4.2	0.4			
						4.3	0.3			
						4.6	0.3			
						4.4	0.5			
						2.9	0.4			
						3.7	0.2			
						3.1	0.3			
						5.5	0.5			
					Average	4.016666667	0.391666667			
					Standard Deviation	1.011599394	0.099620492			
67		35.6	44.1	15.2		5.4	0.7	X		
						6.1	0.4			
						6	0.4			
						3	0.3			
						4.1	0.3			
						2.6	0.3			
						2.4	0.2			
						5.5	0.6			
						3.2	0.4			
						6.4	0.4			
						4	0.4			
						3.5	0.3			

				Average	4.35	0.391666667			
				Standard Deviation	1.456334127	0.137895437			
68		27.4	47.0	16.6	6.4	0.3	X		
					5.1	0.4			
					4.4	0.2			
					3.5	0.3			
					5.3	0.3			
					3	0.3			
					2.8	0.3			
					3.8	0.3			
					3.4	0.2			
					6.9	0.3			
					5.7	0.4			
					3.9	0.2			
				Average	4.516666667	0.291666667			
				Standard Deviation	1.348961441	0.066855792			
69	Proclus	16.0	46.9	25.3	2.7	0.2	X		
					1.9	0.1			
					1.1	0.2			
					2.6	2.4			
					4.7	0.3			
					2.2	0.3			
					2.4	0.5			
					3.1	0.2			
					3.5	0.2			
					2	0.3			
					3.1	0.2			
					3.6	0.3			
				Average	2.741666667	0.433333333			
				Standard Deviation	0.943357961	0.627162924			
70	Hill	20.9	40.7	15.7	5.6	0.6	X		
					5.3	0.6			
					6.8	0.6			

						4.4	0.5			
						4.2	0.6			
						5.8	0.7			
						2.8	0.5			
						4.3	0.5			
						5	0.1			
						5.8	0.6			
						5	0.5			
						4.9	0.5			
					Average	4.991666667	0.525			
					Standard Deviation	1.01395565	0.148477118			
71	Carmichael	19.5	40.3	19.6		12.6	2.1	X		
						9.2	1.1			
						8.4	0.9			
						5.5	0.6			
						5.8	0.6			
						5.3	0.8			
						4.7	0.8			
						7.5	0.9			
						7	0.9			
						6.9	0.8			
						11.5	1.9			
						4.9	0.6			
					Average	7.441666667	1			
					Standard Deviation	2.569208698	0.491750121			
72	Lyell	13.3	42.2	14.5		6.6	1.3	X		
						5.2	0.9			
						4.5	0.9			
						6.4	0.8			
						7.3	1			
						7.7	1.1			
						7.4	1.2			
						8.6	1.4			
						9.3	1.4			

75	Lawrence	7.7	41.2	29		11.3	2.5		X	
						10.2	2.6			
						7	2.2			
						12.9	4			
						13.8	4.4			
						15.2	4.8			
						14.4	3.2			
						12.8	2.5			
						12.5	3.1			
						13.2	2.9			
						10	2.7			
						6.3	1.4			
					Average	11.63333333	3.025			
					Standard Deviation	2.795884421	0.963068014			
76		7.7	43.8	17.9		10.1	1.7		X	
						11.9	2.5			
						12.4	2.1			
						13	2.2			
						12.3	2.4			
						13.2	2.3			
						14.7	3			
						14.7	3.2			
						14.2	2.3			
						6.7	1			
						10.7	1.1			
						10.1	1.8			
					Average	12	2.133333333			
					Standard Deviation	2.318306592	0.661036835			
77		3.9	40.4	11		15.3	3.9		X	
						16.2	3.9			
						15.8	4.3			
						13.5	3.8			
						11.9	4.1			
						14.9	4			

						15.8	4.3			
						14.9	3.9			
						14.9	3.9			
						16.3	4.4			
						15.5	4.1			
						16.4	4.6			
					Average	15.11666667	4.1			
					Standard Deviation	1.294627594	0.248632624			
78	Anville	1.9	49.4	13.7		15.6	4.5	X		
						15.1	3.8			
						16.5	3.4			
						15.8	2.2			
						16.4	5.7			
						16.2	5			
						16.1	5.7			
						16.3	5.8			
						16	4.1			
						15.5	4.5			
						16	4.3			
						16.9	4.2			
					Average	16.03333333	4.433333333			
					Standard Deviation	0.486795334	1.046494871			
79	Shapley	9.4	57.7	22.9		5.3	2.1	X		
						8	1.6			
						7.2	1.6			
						7.5	1.4			
						5.8	1.4			
						4.1	1.2			
						2.6	1.3			
						3.5	1.1			
						2.7	1.1			
						4.3	1.1			
						6	1.1			
						5.3	2.1			

				Average	5.19166667	1.425			
				Standard Deviation	1.810805111	0.364629326			
80	Daly	5.7	59.3	15.7	5	1	X		
					5.2	0.9			
					5.7	1			
					4.2	1			
					8.3	1.2			
					7.6	1			
					5.8	1.1			
					5.5	0.8			
					5.4	1			
					5.2	0.8			
					4.8	1.1			
					6	0.9			
				Average	5.725	0.983333333			
				Standard Deviation	1.15374883	0.119341628			
81		15.8	50.6	10.8	5.398482059	0.7	X		
					5.2	0.9			
					5	0.8			
					2.9	0.7			
					3.7	0.7			
					1.8	0.5			
					3.9	0.9			
					1.3	0.5			
					0.7	0.3			
					2.3	0.6			
					4.1	0.7			
					2	0.7			
				Average	3.191540172	0.666666667			
				Standard Deviation	1.589238369	0.172328087			
82	Pierce	18.1	53.3	21.4	14.5	6.1	X		
					15.7	4.6			
					15.6	4.3			

						15.9	4.9			
						16.5	5.7			
						15.2	5.3			
						15.5	4.3			
						14.2	2.5			
						14.7	3.1			
						15.7	6			
						15.6	2.2			
						16.1	2.3			
					Average	15.43333333	4.275			
					Standard Deviation	0.673300329	1.434081905			
83	Picard	14.5	54.6	21.4		16.8	5.6		X	
						15.2	5.4			
						13	3.2			
						13.1	3.7			
						15	4.5			
						15	5.5			
						15.8	6.5			
						17.5	11.4			
						16.2	6.7			
						15.2	6			
						15.9	5.2			
						16.4	6.6			
					Average	15.425	5.858333333			
					Standard Deviation	1.343756607	2.062856948			
84		22.5	56.9	11.2		12.2	2.6		X	
						13.7	2.7			
						12.6	2			
						12.8	2.3			
						13	2.4			
						10.6	2.2			
						11.3	2.1			
						11	2.5			
						9.6	2.1			

87		28.8	55.0	11.9		2.8	0.4			
						3	0.4			
						3.4	0.4			
						1.2	0.3			
						1	0.4			
						0.3	0.2			
						1	0.3			
					< 0.001	0	0.3			
						1.4	0.3			
						0.7	0.3			
						2.5	0.3			
						1.2	0.4			
					Average	1.541666667	0.333333333			
					Standard Deviation	1.109838918	0.065133895			
88	Delmotte	27.1	60.1	31.6		2.3	0.5	X		
						3.6	0.5			
						2.7	0.6			
						2.2	0.3			
						3.5	0.3			
						2.7	0.4			
						2.5	0.9			
						2.4	0.4			
						0.7	0.3			
						2.2	0.4			
						3.8	0.4			
						3.3	0.4			
					Average	2.658333333	0.45			
					Standard Deviation	0.841490381	0.167874412			
89		36.5	53.7	25.5		4.1	0.4	X		
						4.2	0.4			
						4	0.4			
						1.9	0.3			
						3.8	0.5			
						3.7	0.2			

						3.3	0.4			
						2.8	0.4			
						4.8	0.4			
						3.8	0.3			
						5.5	0.4			
						5.9	0.5			
					Average	3.983333333	0.383333333			
					Standard Deviation	1.089481389	0.083484711			
90		33.8	58.6	13.5		5.5	0.3	X		
						7.5	0.4			
						4	0.3			
						4.5	0.3			
						2.4	0.3			
						2.5	0.3			
						3	0.2			
						3.7	0.2			
						3	0.2			
						5.8	0.3			
						2.2	0.3			
						2.1	0.3			
					Average	3.85	0.283333333			
					Standard Deviation	1.69142221	0.057735027			
91		37.3	59.7	15.5		1.2	0.4	X		
						1.3	0.4			
						1.7	0.4			
						3.5	0.4			
						2.8	0.3			
						5.6	0.5			
						5.1	0.6			
						2.3	0.3			
						1.5	0.4			
						2	0.2			
						2.9	0.3			
						3.3	0.4			

				Average	2.76666667	0.38333333			
				Standard Deviation	1.429134088	0.10298573			
92	40.6	55.6	16.8		2.7	0.2	X		
					3.4	0.2			
					2.5	0.3			
					4	0.2			
					5.4	0.3			
					4.8	0.2			
					4.5	0.2			
					1.4	0.1			
					3.6	0.3			
					2.9	0.5			
					3.1	0.2			
					2.8	0.3			
				Average	3.425	0.25			
				Standard Deviation	1.110384864	0.1			
93	43.4	52.6	11.2		7.5	0.6	X		
					6.7	0.5			
					5.5	0.4			
					5.4	0.3			
					5.7	0.5			
					5	0.4			
					4.9	0.5			
					4.7	0.6			
					4.7	0.6			
					7.6	0.7			
					10.1	1.2			
					5.7	0.3			
				Average	6.125	0.55			
				Standard Deviation	1.604043187	0.239317211			
94	43.0	66.3	18.7		9.2	1.3	X		
					5.7	0.4			
					5.8	0.6			

					5.1	0.4			
					6.3	0.3			
					5.7	0.4			
					2.9	0.3			
					4.3	0.4			
					4.6	0.5			
					9	1.2			
					8.6	0.8			
					9.3	1.3			
				Average	6.375	0.658333333			
				Standard Deviation	2.148625353	0.391868098			
95		45.0	51.9	12.6	4.2	0.4	X		
					7	0.4			
					6	0.6			
					6.7	0.6			
					6	0.4			
					5.4	0.4			
					5.1	0.5			
					5.4	0.4			
					5.6	0.4			
					6	0.3			
					3.9	0.4			
					4.7	0.4			
				Average	5.5	0.433333333			
				Standard Deviation	0.930298095	0.088762536			
96		46.3	39.2	14.3	9.9	0.6	X		
					6	0.4			
					7.1	0.9			
					9.9	0.4			
					5.9	0.3			
					4.3	0.2			
					4.1	0.3			
					3.8	0.3			
					6.6	0.3			

99		64.0	53.3	25.5		10.2	1	X		
						2.9	0.2			
						5	0.5			
						2.2	0.2			
						0.2	0.1			
						1.5	0.2			
						1.9	0.2			
						1.4	0.2			
						3.6	0.2			
						1.2	0.3			
						7.3	1			
						8.3	1.1			
					Average	3.808333333	0.433333333			
					Standard Deviation	3.200698314	0.374974747			
100		66.4	56.9	16.3		17.2	4.5	X		
						10.2	1.8			
						7.9	0.6			
						12.5	1.6			
						8.2	1			
						7.7	0.7			
						16.6	4.1			
						18.8	3.4			
						13.8	2.1			
						8.4	0.8			
						1.4	0.1			
						3.7	0.4			
					Average	10.53333333	1.758333333			
					Standard Deviation	5.387752666	1.48902551			
101		65.0	63.6	24.7		5.3	0.5	X		
						16.7	3.5			
						5.9	0.6			
						1.8	0.2			
						2.8	0.5			
						3.8	0.5			

						1.3	0.3			
						3.3	0.3			
						3.3	0.4			
						0.7	0.1			
						0.8	0.2			
						3.2	0.3			
					Average	4.075	0.616666667			
					Standard Deviation	4.294631956	0.920309566			
102		67.9	65.8	12.7		6.1	0.8	X		
						5	0.8			
						3.5	0.2			
						1.4	0.7			
						3.7	0.5			
						2	0.2			
						3.7	0.3			
						5	0.9			
						0.3	0.3			
						1.1	0.6			
						0.7	0.2			
						3.2	0.3			
					Average	2.975	0.483333333			
					Standard Deviation	1.873802648	0.26571801			
103		62.3	69.9	10.3		5.4	1.1	X		
						0.9	0.3			
						1.6	0.2			
						0.7	0.2			
						4.7	0.3			
						3	0.5			
						2.3	0.4			
						6	0.6			
						6.8	1			
						2.2	0.3			
						3.6	0.3			
						3.4	0.5			

					1	0.2			
				Average	3.2	0.453846154			
				Standard Deviation	2.018250067	0.29330128			
104	53.5	66.1	18		4.7	0.5	X		
					3.8	0.3			
					2.7	0.2			
					1.4	0.2			
					1.6	0.2			
					0.6	0.2			
					1.2	0.3			
					0.6	0.2			
					1.8	0.1			
					3.2	0.2			
					6.2	0.5			
					3.3	0.3			
				Average	2.591666667	0.266666667			
				Standard Deviation	1.724401521	0.123091491			
105	54.4	62.5	29.2		4.8	0.5	X		
					5.3	0.5			
					2.6	0.2			
					1.4	0.2			
					1.4	0.3			
					0.5	0.2			
					0	0.1			
					2.1	0.3			
					1.7	0.4			
					4.4	0.4			
					4.6	0.8			
					11.8	1.3			
				Average	3.383333333	0.433333333			
				Standard Deviation	3.187427955	0.331205329			
106	49.1	63.3	10		6.4	0.6	X		
					3.2	0.4			

						2.1	0.2			
						6.8	0.4			
						4.4	0.2			
						4	0.2			
						2	0.2			
						4.3	0.3			
						6.4	0.5			
						4.5	0.3			
						1.6	0.1			
						5.3	0.5			
					Average	4.25	0.325			
					Standard Deviation	1.778916933	0.154478595			
107		49.1	63.3	10.1		7.3	0.7	X		
						5.4	0.6			
						3.9	0.3			
						4.8	0.3			
						7.4	0.3			
						2.8	0.2			
						3.2	0.3			
						2.2	0.2			
						2.6	0.2			
						6.4	0.3			
						6.6	0.4			
						7	0.5			
					Average	4.966666667	0.358333333			
					Standard Deviation	1.969002208	0.162135372			
108		48.0	64.1	13.6		7.4	0.8	X		
						2.2	0.8			
						3.2	0.3			
						3.3	0.4			
						2.2	0.4			
						3.2	0.1			
						2.4	0.3			
						2.4	0.6			

						4	0.4			
						5.1	0.6			
						6.4	0.5			
						5.4	0.6			
					Average	3.933333333	0.483333333			
					Standard Deviation	1.753092506	0.2081666			
109		47.4	70.0	11.1		5.8	0.4	X		
						8.7	0.5			
						4.4	0.4			
						3.1	0.3			
						1.7	0.3			
						1.9	0.3			
						2.8	0.3			
						3.9	0.4			
						4.8	0.5			
						8.5	0.8			
						4.6	0.5			
						3.9	0.3			
					Average	4.508333333	0.416666667			
					Standard Deviation	2.248416952	0.14668044			
110		43.3	66.0	10.2		8.1	1.2	X		
						9.2	1.1			
						7.2	1.2			
						5.7	0.9			
						6.9	1			
						9.2	0.9			
						11.2	2.4			
						5.9	1			
						8.3	1.2			
						7.2	1			
						7.3	0.5			
						4.8	0.5			
					Average	7.583333333	1.075			
					Standard Deviation	1.759562618	0.480766434			

111		42.8	66.6	17.5		10.3	1.1	X		
						5.5	0.8			
						3.5	0.5			
						4.3	0.5			
						3.3	0.5			
						1	0.3			
						2.3	0.3			
						3.1	0.4			
						3.9	0.3			
						8.8	0.8			
						3.7	0.6			
						10.9	1.2			
					Average	5.05	0.608333333			
					Standard Deviation	3.204967735	0.305876782			
112		40.9	65.7	10.8		3.5	0.6	X		
						6.4	0.4			
						8.9	0.6			
						4.8	0.3			
						3.7	0.3			
						3.4	0.4			
						7.5	0.7			
						7.2	0.6			
						4.9	0.5			
						3.4	0.1			
						3.5	0.2			
						3.5	0.4			
					Average	5.058333333	0.425			
					Standard Deviation	1.95003885	0.181533869			
113		35.7	66.3	12.7		7	0.7	X		
						5.9	0.5			
						3.7	0.5			
						5.7	0.7			
						5	0.6			

						3.8	0.5			
						4.5	0.5			
						3.8	0.4			
						3.8	0.6			
						5.5	0.4			
						7.8	0.4			
						4	0.6			
					Average	5.041666667	0.533333333			
					Standard Deviation	1.369444701	0.107308674			
114		35.3	67.0	18.8		6	0.6	X		
						7	0.5			
						8.8	0.7			
						9	0.4			
						5.1	0.4			
						5.2	0.7			
						4.1	0.5			
						8.9	0.7			
						4.1	0.4			
						9.1	0.7			
						8.5	0.8			
						3.8	0.8			
					Average	6.633333333	0.6			
					Standard Deviation	2.149136543	0.153741223			
115		33.1	67.9	13.7		4.3	0.5	X		
						3.9	0.5			
						5	0.4			
						6.2	0.7			
						3.7	0.6			
						4.4	0.4			
						3.8	0.5			
						3.1	0.4			
						4.7	0.7			
						3.6	0.6			
						4.6	0.4			

						4.4	0.5			
					Average	4.308333333	0.516666667			
					Standard Deviation	0.801655484	0.111464086			
116		36.2	60.8	19.8		3.7	0.5	X		
						2.8	0.4			
						2.7	0.4			
						2.4	0.4			
						1.9	0.4			
						3.6	0.5			
						2.9	0.4			
						3.4	0.3			
						3.4	0.3			
						4	0.4			
						1.4	0.2			
						4.5	0.3			
					Average	3.058333333	0.375			
					Standard Deviation	0.886728752	0.08660254			
117		29.6	69.5	17		4.2	0.6	X		
						4.5	0.5			
						5.2	0.5			
						4.1	0.6			
						3.9	0.5			
						3	0.4			
						3.1	0.4			
						4.2	0.2			
						4.1	0.5			
						3.9	0.4			
						4.5	0.5			
						4.3	0.3			
					Average	4.083333333	0.45			
					Standard Deviation	0.593653302	0.116774842			
118		27.6	68.8	14.2		5.7	0.5	X		
						4.4	0.5			

						3.2	0.4			
						3.9	0.5			
						4.4	0.4			
						4.8	0.5			
						3.9	0.6			
						4.9	0.4			
						4.3	0.4			
						6.2	0.6			
						5.7	0.5			
						4.9	0.5			
					Average	4.691666667	0.483333333			
					Standard Deviation	0.863879551	0.071774056			
119		26.5	63.3	10		5.8	0.8	X		
						7.8	0.8			
						7.4	0.8			
						8.3	1			
						3.9	0.5			
						5.3	0.7			
						6	0.8			
						8.2	0.7			
						7.8	0.8			
						11.1	0.9			
						3.7	0.5			
						5.8	0.8			
					Average	6.758333333	0.758333333			
					Standard Deviation	2.08782546	0.144337567			
120		21.8	66.7	11.8		2.3	0.4	X		
						3.9	0.7			
						3.9	0.4			
						6.9	1			
						4.1	1			
						5.4	0.9			
						11.8	1.3			
						7.6	0.9			

						3.6	0.8			
						3.3	0.5			
						1.9	0.4			
						2.2	0.4			
					Average	4.741666667	0.725			
					Standard Deviation	2.841081207	0.304884479			
121		19.8	66.7	12.1		11.5	3.4	X		
						11.3	3.4			
						13.6	3.1			
						10.2	3			
						11.4	3			
						14.8	4.2			
						13.6	4.1			
						10.1	2.7			
						9.9	2.4			
						10.8	2.2			
						10.8	1.7			
						12.3	3.7			
					Average	11.69166667	3.075			
					Standard Deviation	1.571020707	0.749696908			
122	Auzout	10.2	63.8	30.5		6.8	0.7	X		
						7.2	0.6			
						5.7	0.8			
						5.7	0.9			
						6.3	1			
						7.8	1			
						6.2	0.9			
						5.7	1			
						5.4	1			
						4.6	0.8			
						7.3	1.1			
						7.3	0.7			
					Average	6.333333333	0.875			
					Standard Deviation	0.957585347	0.154478595			

123		11.8	65.7	10.7		1	0.2	X		
						1.3	0.2			
						2	0.6			
						2.5	0.6			
						1.3	0.2			
						3.9	0.4			
						2.3	0.4			
						1.8	0.5			
						0.7	0.3			
						1.4	0.4			
						2.2	0.6			
						0.5	0.3			
					Average	1.741666667	0.391666667			
					Standard Deviation	0.929768626	0.156427929			
124		5.9	64.2	10		5.3	1.1	X		
						5.1	0.7			
						4.3	0.7			
						4.1	0.8			
						5.9	1			
						5.4	1.1			
						6.7	1.2			
						6.4	1.1			
						5.1	0.9			
						7.1	1.3			
						4.5	0.8			
						3.3	1			
					Average	5.266666667	0.975			
					Standard Deviation	1.125193586	0.195982374			
125	Townley	3.5	63.0	16.8		4.7	0.8	X		
						4.2	0.1			
						4.1	0.6			
						4.6	0.9			
						5.2	0.8			

						5.2	1			
						6	1			
						5.6	1			
						5.5	1			
						4.8	0.9			
						5.6	0.9			
						4.3	0.7			
					Average	4.983333333	0.808333333			
					Standard Deviation	0.623528571	0.257464325			
126	Pomortov	0.6	66.7	22.3		9.2	1.4	X		
						6.2	1.6			
						6.7	1.5			
						7	1.3			
						5.9	0.6			
						7.3	1.5			
						4.9	1			
						5.7	1.1			
						7.4	1.3			
						7.1	1.2			
						8	1.9			
						9.3	1.7			
					Average	7.058333333	1.341666667			
					Standard Deviation	1.327648867	0.344985727			
127		4.4	58.0	15.3		5.1	0.8	X		
						3.9	0.8			
						5.3	0.7			
						6.2	0.7			
						6.9	1			
						5.9	0.7			
						5.7	0.7			
						4.9	0.7			
						6.2	0.8			
						4.9	0.8			
						5.3	1			

						4.9	0.7			
					Average	5.433333333	0.783333333			
					Standard Deviation	0.795822426	0.111464086			
128		2.5	63.5	15.6		5	0.8	X		
						6.3	0.9			
						7.3	1.3			
						6.6	1.2			
						6.7	0.9			
						4.1	0.9			
						3.7	0.5			
						4.3	0.6			
						4.7	0.4			
						4.2	0.6			
						5	0.8			
						7	1			
					Average	5.408333333	0.825			
					Standard Deviation	1.284493769	0.270100991			
129		5.9	69.6	10		5.9	1.3	X		
						5	1			
						5.2	1			
						5	1			
						4.4	0.8			
						5.2	0.9			
						5.3	0.8			
						7.6	1.2			
						6.5	0.9			
						7.1	1.3			
						4.1	1.1			
						5.5	1.4			
					Average	5.566666667	1.058333333			
					Standard Deviation	1.04301428	0.202072594			
130		8.3	78.4	10.3		4.5	0.7	X		
						5.1	0.7			

						6	0.8			
						6.8	0.9			
						6.5	0.9			
						6.5	0.9			
						5.7	0.8			
						4.5	0.6			
						3.4	0.6			
						4.1	0.8			
						5.3	0.7			
						5.7	1			
					Average	5.34166667	0.783333333			
					Standard Deviation	1.056975387	0.126730446			
131		16.5	76.0	12.3		4.5	0.8	X		
						4.7	0.9			
						4.5	0.6			
						4.4	0.7			
						7.6	1			
						5.9	0.9			
						4.8	0.7			
						7.3	1			
						4.5	0.7			
						5.5	0.9			
						4.6	0.8			
						5	0.7			
					Average	5.275	0.808333333			
					Standard Deviation	1.112021092	0.131137217			
132		8.3	71.9	38.7		4.1	0.7	X		
						4.9	0.8			
						5.6	1			
						3.7	1			
						4.5	0.7			
						4.9	0.9			
						4.8	0.7			
						4.7	0.7			

						3.8	0.7			
						4.3	0.6			
						3.9	0.8			
						4.4	0.7			
					Average	4.466666667	0.775			
					Standard Deviation	0.551581748	0.128805703			
133		24.3	75.6	14.5		3.7	0.5	X		
						4.4	0.6			
						3.5	0.4			
						3.7	0.4			
						3.8	0.4			
						4.8	0.4			
						3	0.5			
						3.5	0.3			
						3.6	0.5			
						4.1	0.6			
						4.4	0.5			
						3.8	0.4			
					Average	3.858333333	0.458333333			
					Standard Deviation	0.490747729	0.090033664			
134		29.9	79.5	15.9		5.6	0.6	X		
						4.1	0.4			
						4.3	0.5			
						4.1	0.5			
						4.6	0.5			
						5.8	0.5			
						4.4	0.4			
						4.6	0.4			
						6.5	0.6			
						4.6	0.6			
						4.9	0.6			
						4.4	0.5			
					Average	4.825	0.508333333			
					Standard Deviation	0.750908541	0.079296146			

135		31.5	76.8	14.7		3.9	0.4	X		
						3.4	0.4			
						4.1	0.4			
						4.8	0.4			
						5	0.3			
						4.7	0.6			
						6.6	0.8			
						3.9	0.6			
						3	0.4			
						3.2	0.4			
						4.3	0.5			
						3.7	0.5			
					Average	4.21666667	0.475			
					Standard Deviation	0.978712822	0.135680105			
136		35.3	77.5	10		1.4	0.4	X		
						0.2	0.5			
						2.2	0.4			
						1.6	0.4			
						0.9	0.4			
						0.1	0.3			
						1.2	0.5			
						2.7	0.4			
						3.8	0.4			
						2.7	0.4			
						0.4	0.4			
						2.3	0.5			
					Average	1.625	0.41666667			
					Standard Deviation	1.145842286	0.057735027			
137		39.3	73.6	24		6.3	0.5	X		
						4.7	0.7			
						5	0.4			
						4.9	0.3			
						4.3	0.3			

						4.3	0.3			
						4.2	0.5			
						3.9	0.3			
						6.1	0.5			
						7.3	0.8			
						4	0.4			
						4.2	0.4			
					Average	4.933333333	0.45			
					Standard Deviation	1.074779752	0.162368828			
138		44.2	76.1	12.3		3.2	0.3	X		
						1.7	0.2			
						3.4	0.3			
						3.9	0.3			
						1.9	0.6			
						3	0.4			
						6.8	0.7			
						2.9	0.5			
						3.8	0.4			
						2.3	0.3			
						2	0.4			
						2.8	0.3			
					Average	3.141666667	0.391666667			
					Standard Deviation	1.358112549	0.144337567			
139		44.0	70.8	36.5		2.7	0.3	X		
						3.6	0.2			
						2.9	0.2			
						3.9	0.4			
						3.1	0.3			
						3.7	0.4			
						3.2	0.8			
						5	0.9			
						6	0.5			
						4.1	0.3			
						3.8	0.5			

						3.9	0.4			
					Average	3.825	0.433333333			
					Standard Deviation	0.919609601	0.218812221			
140		52.2	76.5	21.1		0.2	0.1	X		
						0.3	0.1			
						0.4	0.2			
						1	0.2			
						5.1	1			
						8	0.8			
						8.3	0.8			
						6.8	0.7			
						2.5	0.3			
						4.1	0.4			
						1.8	0.2			
						0.6	0.2			
					Average	3.258333333	0.416666667			
					Standard Deviation	3.099694511	0.318614425			
141		66.9	77.0	9.5		3	0.2	X		
						4.7	0.2			
						6	0.8			
						10	1.1			
						8.2	1.3			
						2.9	1.3			
						6.8	0.7			
						3.7	0.4			
						3.7	0.3			
						5.4	0.3			
						3.4	0.3			
						1.6	0.1			
					Average	4.95	0.583333333			
					Standard Deviation	2.442241891	0.442787315			
142		65.7	76.5	9.5		1	0.4	X		
						1	0.1			

						1.4	0.1			
						1.3	0.1			
						0.7	0.3			
						1.1	0.4			
						0.3	0.2			
						1.4	0.2			
						0.6	0.3			
						0.1	0.2			
						0.1	0.2			
						0.7	0.3			
					Average	0.808333333	0.233333333			
					Standard Deviation	0.469929073	0.107308674			
143		68.8	76.0	12.2		11.2	4.6	X		
						0.8	0.3			
						0.8	0.2			
						1.1	0.3			
						8.7	2.7			
						2.8	0.4			
						1.2	0.4			
						0.4	0.3			
						2.7	0.7			
						2.9	0.6			
						0.7	0.1			
						3.9	0.9			
					Average	3.1	0.958333333			
					Standard Deviation	3.42636834	1.339238816			
144		69.1	85.1	12.9		2.9	0.1	X		
						3.4	0			
						1.7	0.6			
						0.5	0.3			
						0.6	0.9			
						3.1	1.1			
						2.1	0.9			
						4.4	0.6			

						4.2	0.7			
						1.9	0.1			
						1.5	0.2			
						2.1	0.2			
					Average	2.366666667	0.475			
					Standard Deviation	1.262993078	0.372033723			
145		66.8	85.9	19.5		1.6	0.2	X		
						1	0.4			
						0.6	0.2			
						1.1	0.5			
						5.7	1.4			
						12.9	4.9			
						0.1	0.3			
						0	0.2			
						1.4	0.1			
						1.9	0.2			
						1.4	0.2			
						1.1	0.2			
					Average	2.4	0.733333333			
					Standard Deviation	3.6138622	1.35735929			
146		61.3	80.4	12.1		2.8	0.1	X		
						3.1	0.1			
						3	0.1			
						2.8	1			
						2.9	1			
						2.1	0.7			
						10.2	5.9			
						3.6	0.9			
						1.4	0.6			
						0.9	0.6			
						1.2	0.2			
						1.8	0.2			
					Average	2.983333333	0.95			
					Standard Deviation	2.426307832	1.598578914			

147		58.8	85.5	12		0.5	0.4	X		
						4.4	0.5			
						3.4	0.4			
						1.2	0.5			
						3.7	1.1			
						5.5	1.2			
						4.1	1.3			
						0.3	0.4			
						3.1	0.6			
						2.6	0.4			
						2.8	0.4			
						3.8	0.4			
					Average	2.95	0.633333333			
					Standard Deviation	1.586018457	0.349891758			
148		51.9	77.9	15.4		2.2	0.2	X		
						1.6	0.5			
						6.4	1			
						4.7	0.5			
						1	0.5			
						2.8	0.2			
						4.6	0.2			
						1.1	0.1			
						11	2.9			
						1.8	0.2			
						1.4	0.4			
						2.2	0.3			
					Average	3.4	0.583333333			
					Standard Deviation	2.922949942	0.768508985			
149		51.9	83.6	13.1		1.3	0.1	X		
						0.7	0.2			
						2.1	0.5			
						1	0.5			
						2.2	0.3			

						0.6	0.3			
						1	0.2			
						1.4	0.5			
						5.2	0.7			
						0.7	0.3			
						1	0.4			
						0.8	0.2			
					Average	1.5	0.35			
				Standard Deviation		1.276358456	0.173205081			
150		54.1	88.7	31.2		10	1.7	X		
						9.2	2.1			
						4.1	0.1			
						1.4	0.1			
						8.1	1.1			
						7	0.7			
						1.1	0.3			
						11.4	2.4			
						3.3	0.5			
						3.5	0.5			
						1.6	0.4			
						0.6	0.1			
					Average	5.108333333	0.833333333			
				Standard Deviation		3.8389057	0.809414304			
151		49.5	80.9	21.6		1.6	0.3	X		
						3	0.2			
						1.4	0.3			
						0.7	0.1			
						4.3	0.8			
						0.3	0.1			
						0.9	0.2			
						2.4	0.4			
						3.3	0.3			
						1.7	0.4			
						2.1	0.4			

						1.6	0.2			
					Average	1.941666667	0.308333333			
					Standard Deviation	1.154798946	0.188092498			
152		45.1	90.8	14.1		0.2	0.4	X		
						1.8	0.3			
						8	0.7			
						1	0.6			
						3.1	0.5			
						3.2	0.5			
						0.9	0.2			
						3.8	0.5			
						0.2	0.2			
						1.2	0.2			
						6.4	0.6			
						1.7	0.2			
					Average	2.625	0.408333333			
					Standard Deviation	2.449907234	0.183195541			
153		44.3	87.4	15.5		0.5	0.3	X		
						0.5	0.2			
						4.2	0.5			
						2.6	0.4			
						4.4	0.5			
						1.7	0.3			
						0.2	0.2			
						0.4	0.2			
						2.2	0.3			
						1.1	0.3			
						3.6	0.4			
						1.1	0.3			
					Average	1.875	0.325			
					Standard Deviation	1.519045753	0.105528971			
154		38.5	82.6	19		1.8	0.3	X		
						3.5	0.3			

					2.2	0.3		
					5.3	0.3		
					1.9	0.4		
					3	0.4		
					0.7	0.3		
					3.4	0.4		
					3.2	0.4		
					4	0.3		
					2.8	0.3		
					3.7	0.6		
				Average	2.958333333	0.358333333		
				Standard Deviation	1.199589576	0.090033664		
155	38.5	87.4	13.2		4.3	0.6	X	
					2.5	0.3		
					2	0.4		
					3.2	0.5		
					3	0.4		
					4	0.6		
					4.2	0.4		
					4.3	0.4		
					3.9	0.4		
					3.1	0.4		
					2.8	0.4		
					3.7	0.4		
				Average	3.416666667	0.433333333		
				Standard Deviation	0.761378335	0.088762536		
156	35.8	98.0	19.5		5.4	0.4	X	
					3	0.6		
					2.4	0.5		
					3.8	0.3		
					4.3	0.4		
					3.3	0.4		
					1.4	0.4		
					3.4	0.4		

						4.4	0.5			
						3.4	0.3			
						2.6	0.4			
						3.5	0.5			
					Average	3.408333333	0.425			
					Standard Deviation	1.035249933	0.08660254			
157		29.0	89.5	22		4.4	0.3	X		
						4.1	0.4			
						2.8	0.4			
						6.2	0.5			
						4.2	0.5			
						5	0.4			
						4.8	0.4			
						5.2	0.4			
						4.1	0.3			
						4.7	0.3			
						4.3	0.4			
						2.5	0.4			
					Average	4.358333333	0.391666667			
					Standard Deviation	0.994035241	0.066855792			
158		27.0	84.5	10		5	0.3	X		
						6	0.3			
						5	0.4			
						5.9	0.4			
						5.1	0.3			
						5.2	0.4			
						6.4	0.3			
						4.8	0.4			
						4.9	0.2			
						5.7	0.4			
						5	0.4			
						5.2	0.3			
					Average	5.35	0.341666667			
					Standard Deviation	0.516104288	0.066855792			

159		16.1	86.7	13.2		7.2	1		X	
						7.5	0.9			
						10.4	1.9			
						8.7	1.3			
						9.3	1.7			
						8.2	1.2			
						8.3	1.7			
						9	1.4			
						9.1	1.5			
						7	1.1			
						7.7	1			
						7.1	1.1			
					Average	8.291666667	1.316666667			
					Standard Deviation	1.046603453	0.324270744			
160		19.1	84.3	10.1		5.6	0.4		X	
						4.4	0.6			
						5.9	0.6			
						5.4	0.6			
						5.1	0.5			
						5.3	0.4			
						5.8	0.6			
						5.4	0.5			
						4.7	0.6			
						5.3	0.6			
						5.5	0.6			
						6.3	0.8			
					Average	5.391666667	0.566666667			
					Standard Deviation	0.510718448	0.107308674			
161	Virchow	9.9	83.5	18.8		6.3	1.2		X	X
						8	1			
						7.8	1.3			
						9.1	1.4			
						9.3	1.6			

						7.7	1.2			
						7.5	1.4			
						6.6	1			
						8.8	0.9			
						6	1			
						9.3	1.2			
						9.5	0.9			
					Average	7.991666667	1.175			
					Standard Deviation	1.232483327	0.222076973			
162	Peck	2.9	86.7	11.6		12.2	2.7	X		
						12.9	2.8			
						11	2.5			
						11	2.7			
						11.7	2.9			
						10.6	2.1			
						12.6	2.7			
						12.7	3.1			
						12.1	2.9			
						12.1	2.4			
						12	3.1			
						12.4	3			
					Average	11.941666667	2.741666667			
					Standard Deviation	0.73169583	0.296826651			
163		7.7	91.1	11.8		4	0.5	X		
						4.9	0.7			
						5.8	1			
						4.5	0.9			
						4.7	0.8			
						3.4	0.4			
						6	0.7			
						3.9	0.5			
						3.7	0.5			
						4.6	0.5			
						5.3	0.6			

						3.9	0.7			
					Average	4.558333333	0.65			
					Standard Deviation	0.829521585	0.183402191			
164	Nunn	4.6	90.8	20		8.2	1.5		X	
						6.2	1.2			
						7.6	1.6			
						5.8	1.1			
(Mare _Highland border area.)						4.9	0.8			
						6	0.9			
						5.7	1			
						6.8	1.3			
						9	1.5			
						7.3	1.7			
						6.5	1			
						6.9	1.2			
					Average	6.741666667	1.233333333			
					Standard Deviation	1.150856071	0.290245455			
165		9.0	98.2	26.6		8.6	0.8		X	
						6.2	0.7			
						5.1	0.8			
						3.4	0.8			
		Part Crater data				6.3	0.9			
						5.8	0.9			
						5.1	0.7			
						5.6	0.9			
						5.9	0.7			
						6	0.7			
						6.2	0.7			
						5.1	0.8			
					Average	5.775	0.783333333			
					Standard Deviation	1.195540958	0.083484711			
166		19.1	97.8	20.5		7.2	1.1		X	
						6.2	0.6			

						4.7	0.6			
						5.8	0.8			
						5.8	0.7			
						6.5	1			
						5.3	0.3			
						5.4	0.4			
						5.3	0.7			
						6	0.8			
						7.5	0.9			
						9.3	1			
					Average	6.25	0.741666667			
					Standard Deviation	1.2515445	0.242930343			
167		18.7	94.9	10		4.5	0.8	X		
						5.4	0.8			
						5.5	0.8			
						5.1	0.5			
						4.7	0.7			
						5.6	0.7			
						6.1	0.8			
						4.6	0.6			
						5.1	0.6			
						5.4	0.8			
						5.8	0.8			
						6.3	0.7			
					Average	5.341666667	0.716666667			
					Standard Deviation	0.57121614	0.10298573			
168		7.7	91.1	13.8		3.9	0.7	X		
						3.4	0.7			
						3.6	0.6			
						3.5	0.6			
						3.3	0.4			
						4	0.6			
						6.7	0.7			
						4.8	0.6			

						5.3	0.6			
						5.4	0.8			
						3.1	0.5			
						3.7	0.6			
					Average	4.225	0.61666667			
					Standard Deviation	1.093056598	0.10298573			
169		8.5	94.2	18.6		6.7	0.9	X		
						8.1	1.1			
						10.9	1.2			
						9.9	1.3			
						10.1	1.5			
						10.1	1.4			
						12.5	1.5			
						11.5	1.6			
						12.4	0.8			
						12.2	2.2			
						9.3	1.1			
						9.7	1.1			
					Average	10.28333333	1.308333333			
					Standard Deviation	1.759562618	0.372847357			
170		21.9	94.4	17.1		3.7	0.7	X		
						4.9	0.7			
						5.7	0.6			
						4.9	0.7			
						6.1	0.6			
						5.2	0.8			
						4.3	0.7			
						5.6	0.9			
						4.6	0.9			
						5.3	1			
						5.4	0.8			
						4.8	1.1			
					Average	5.041666667	0.791666667			
					Standard Deviation	0.655686085	0.156427929			

171		25.4	95.4	11.1		5.1	0.6	X		
						5.1	0.6			
						4.1	0.5			
						4.1	0.4			
						4.4	0.6			
						5.3	0.7			
						2.6	0.7			
						6.3	0.7			
						4.8	0.6			
						4.6	0.7			
						4.1	0.4			
						4.8	0.7			
					Average	4.608333333	0.6			
					Standard Deviation	0.891840113	0.112815215			
172		33.6	98.2	24		2.8	0.5	X		
						3.8	0.5			
						2.6	0.5			
						4.9	0.5			
						3.1	0.7			
						2.5	0.3			
						3.9	0.5			
						3.8	0.4			
						3.1	0.6			
						3.7	0.4			
						3.5	0.5			
						6.9	1.2			
					Average	3.716666667	0.55			
					Standard Deviation	1.204411085	0.227636073			
173		36.0	98.4	18.6		2.6	0.3	X		
						2.5	0.4			
						3.2	0.5			
						3.7	0.6			
						1.7	0.4			

						1	0.4			
						1.6	0.4			
						2.9	0.4			
						3.2	0.4			
						2.1	0.4			
						5	0.6			
						3.4	0.2			
					Average	2.741666667	0.416666667			
					Standard Deviation	1.079105971	0.111464086			
174		40.0	95.0	18		1.3	0.3	X		
						1.7	0.4			
						1.8	0.3			
						0.9	0.4			
						2.5	0.5			
						2.8	0.4			
						1.6	0.3			
						1.1	0.3			
						0.9	0.4			
						0.9	0.3			
						1.9	0.3			
						1.9	0.4			
					Average	1.608333333	0.358333333			
					Standard Deviation	0.624439142	0.066855792			
175		43.3	95.3	17.3		0.6	0.2	X		
						2.7	0.3			
						1.4	0.3			
						2.1	0.3			
						0.2	0.3			
						0.3	0.3			
						1.5	0.3			
						2.2	0.2			
						1.1	0.3			
						2.2	0.4			
						2.3	0.3			

						2.4	0.3			
					Average	1.583333333	0.291666667			
					Standard Deviation	0.866375242	0.051492865			
176		47.4	93.3	10.5		1.7	0.2	X		
						0.6	0.3			
						2.2	0.4			
						1.8	0.4			
						1.2	0.3			
						0.6	0.3			
						2.6	0.3			
						1.3	0.2			
						0.7	0.1			
						0.6	0.2			
						1.3	0.3			
						0.5	0.3			
					Average	1.258333333	0.275			
					Standard Deviation	0.698645876	0.08660254			
177		46.9	85.5	18		4	0.4	X		
						0.9	0.2			
						0.4	0.3			
						3.7	0.5			
						6.3	0.7			
						3.4	0.3			
						1.7	0.2			
						1	0.3			
						2.5	0.2			
						4.5	0.5			
						0.6	0.3			
						0.9	0.3			
					Average	2.491666667	0.35			
					Standard Deviation	1.882193273	0.150755672			
178		48.7	98.4	17		0.7	0.1	X		
						1.9	0.3			

						2.3	0.2			
						1.3	0.2			
						3.6	0.3			
						3.2	0.5			
						1.1	0.2			
						2.1	0.2			
						2	0.3			
						0.2	0.2			
						2	0.3			
						2.1	0.1			
					Average	1.875	0.241666667			
					Standard Deviation	0.961178254	0.108362467			
179		58.6	96.2	15.5		0.1	0.1	X		
						3.9	0.6			
						4.8	0.9			
						0.4	0.4			
						0.2	0.3			
						3.2	0.8			
						1.4	0.4			
						1	0.2			
						2.1	0.3			
						0.7	0.1			
						7.3	1.6			
						0.1	0.2			
					Average	2.1	0.491666667			
					Standard Deviation	2.275162332	0.433711956			
180		53.5	95.9	9.5		1.5	0.1	X		
						0.1	0.1			
						2.9	0.3			
						1.8	0.5			
						1.7	0.4			
						0.4	0.1			
						1.1	0.1			
						0.4	0.2			

						3.6	0.5			
						0.6	0.3			
						1.2	0.5			
						1.4	0.1			
					Average	1.391666667	0.266666667			
					Standard Deviation	1.036127698	0.172328087			
181		57.4	89.8	9.1		0.4	0.3	X		
						1.8	0.3			
						1.2	0.3			
						1.2	0.3			
						5	0.3			
						1.4	0.3			
						2	0.3			
						1	0.4			
						0.3	0.4			
						2.7	0.7			
						1.1	0.2			
						3.3	0.5			
					Average	1.783333333	0.358333333			
					Standard Deviation	1.333371212	0.131137217			
182		67.7	97.6	15.2		2.4	0.1	X		
						1.8	0.1			
						0.8	0.2			
						5.3	2.3			
						3.5	0.2			
						4.2	2.3			
						3	1.2			
						0.3	0.2			
						4.5	0.4			
						0.5	0.1			
						0.7	0.1			
						1.9	0.1			
					Average	2.408333333	0.608333333			
					Standard Deviation	1.697837305	0.847947611			

183		67.7	104.0	16.5		0.6	0.2	X		
						19.7	1.8			
						1.7	0.4			
						8	1.3			
						4.3	0.6			
						5.6	0.5			
						5.9	0.7			
						2	0.4			
						1	0.2			
						1.9	0.2			
						10.2	2.6			
						2	0.2			
					Average	5.241666667	0.758333333			
					Standard Deviation	5.451848449	0.760930451			
184		66.2	108.4	16		2.5	0.1	X		
						2.3	0.1			
						2.6	0.9			
						3.8	0.3			
						9.4	1.8			
						11.8	2.4			
						14.6	2.9			
						0.6	0.2			
						5.9	1.1			
						1.9	0.1			
						0	0.3			
						2.9	0.5			
					Average	4.858333333	0.891666667			
					Standard Deviation	4.646104592	0.971838308			
185		61.5	107.5	12		1.1	0.1	X		
						1.7	0.1			
						3.6	0.2			
						9.4	0.6			
						7.1	0.3			

						7.2	0.5			
						3.5	0.2			
						3.6	0.3			
						3.2	0.3			
						0.3	0.1			
						2.2	0.1			
						1	0.1			
					Average	3.658333333	0.241666667			
					Standard Deviation	2.835636319	0.167648622			
186		54.7	109.6	9.5		0.6	0.2	X		
						2.1	0.4			
						0.3	0.3			
						0.9	0.2			
						1.8	0.3			
						0.7	0.3			
						1.3	0.2			
						0.7	0.2			
						1.9	0.1			
						3.8	0.4			
						0.6	0.2			
						2.7	0.4			
					Average	1.45	0.266666667			
					Standard Deviation	1.046639645	0.098473193			
187		46.1	110.0	11		2.2	0.3	X		
						1.9	0.3			
						0.5	0.2			
						1.5	0.5			
						2.7	0.4			
						2	0.3			
						1.2	0.4			
						0.1	0.3			
						1.8	0.5			
						2.6	0.3			
						2.7	0.3			

						1.8	0.4			
					Average	1.75	0.35			
					Standard Deviation	0.824069723	0.090453403			
188		50.3	99.5	11.5		0	0.1	X		
						1	0.1			
						0.6	0.2			
						4.1	0.5			
						4.3	0.5			
						3.4	0.5			
						2	0.3			
						0.4	0.1			
						0.1	0.2			
						2.8	0.3			
						6.5	0.9			
						1.4	0.3			
					Average	2.216666667	0.333333333			
					Standard Deviation	2.033283656	0.234843597			
189		37.4	110.1	18.2		3.8	0.3	X		
						1.7	0.2			
						3	0.3			
						6.5	0.4			
						7.1	0.5			
						6.3	0.5			
						3.9	0.3			
						3.1	0.2			
						5.4	0.4			
						2	0.3			
						2.6	0.2			
						3.7	0.3			
					Average	4.091666667	0.325			
					Standard Deviation	1.814315966	0.105528971			
190		35.9	102.6	20.1		4.6	0.4	X		

						6.1	0.7			
						4.2	0.4			
						4.3	0.3			
						3.8	0.4			
						2.2	0.3			
						3.2	0.3			
						3.7	0.3			
						3.3	0.2			
						5.4	0.5			
						5.3	0.4			
						4.5	0.3			
					Average	4.216666667	0.375			
					Standard Deviation	1.076047763	0.128805703			
191		42.1	110.7	17.5		0.7	0.3	X		
						1.9	0.3			
						3.1	0.6			
						3.8	0.4			
						4	0.3			
						1.7	0.3			
						2.4	0.3			
						2.1	0.3			
						1.7	0.2			
						2.7	0.4			
						4.7	0.6			
						3.4	0.4			
					Average	2.683333333	0.366666667			
					Standard Deviation	1.15351899	0.123091491			
192		45.5	106.3	19.9		0.3	0.3	X		
						0.6	0.3			
						4.3	0.5			
						2.6	0.3			
						7	0.8			
						2.6	0.3			
						4.4	0.3			

						2.9	0.2			
						1.2	0.2			
						0.9	0.2			
						1.5	0.3			
						0.5	0.3			
					Average	2.4	0.333333333			
					Standard Deviation	2.01945087	0.166969422			
193		38.8	103.8	10.6		4.7	0.4	X		
						2.5	0.3			
						2.8	0.4			
						6.8	0.7			
						3.6	0.4			
						2.6	0.3			
						3.3	0.5			
						1.5	0.3			
						2.7	0.3			
						3.7	0.4			
						2.9	0.3			
						3.9	0.5			
					Average	3.416666667	0.4			
					Standard Deviation	1.341527849	0.120604538			
194		32.1	103.2	20.2		6.6	0.7	X		
						3.7	0.7			
						5.3	0.7			
						4.7	0.6			
						5.2	0.6			
						6	0.9			
						4.3	0.3			
						4.2	0.5			
						5	0.3			
						9.4	1.2			
						4	0.5			
						6	0.7			
					Average	5.366666667	0.641666667			

				Standard Deviation	1.547627706	0.246644143			
195	28.6	104.3	34.1		6.3	0.7	X		
					4.7	0.6			
					4.5	0.6			
					5.8	0.9			
					9.1	1.3			
					10.4	2			
					10.1	1.6			
					7.5	1			
					5.3	0.4			
					8.6	0.8			
					6.7	0.9			
					3.9	0.5			
				Average	6.908333333	0.941666667			
				Standard Deviation	2.222798536	0.475697255			
196	35.6	110.0	19.1		2.8	0.3	X		
					2.2	0.2			
					2.6	0.2			
					3.4	0.3			
					3.8	0.4			
					3.9	0.4			
					2.9	0.3			
					2.4	0.3			
					2.2	0.2			
					2.2	0.3			
					3.7	0.3			
					4	0.3			
				Average	3.008333333	0.291666667			
				Standard Deviation	0.712815587	0.066855792			
197	28.5	106.4	15.5		7	0.9	X		
					5.1	0.7			
					5.4	0.7			
					5.7	0.5			

						4.9	0.5			
						6.3	0.6			
						5.2	0.6			
						5.3	0.7			
						6.5	1			
						5.6	0.6			
						6.4	0.7			
						7.5	0.8			
					Average	5.908333333	0.691666667			
					Standard Deviation	0.820707382	0.150504203			
198		21.8	106.8	21.1		6.4	0.7	X		
						6.9	0.6			
						5.9	0.6			
						6.2	0.6			
						6.8	0.6			
						8.1	0.8			
						3.7	0.4			
						5.6	0.3			
						7.1	0.6			
						6.7	0.7			
						7.2	0.6			
						6.9	0.5			
					Average	6.458333333	0.583333333			
					Standard Deviation	1.084987083	0.133711585			
199		19.8	107.0	14.5		5.8	0.6	X		
						6.9	0.6			
						6.9	0.6			
						7.1	0.7			
						6.7	0.7			
						5.7	0.5			
						6.7	0.8			
						5.7	0.7			
						6.1	0.6			
						6.5	0.7			

						6.5	0.8			
						7.7	0.7			
					Average	6.525	0.666666667			
					Standard Deviation	0.61218684	0.088762536			
200		16.7	104.8	12.9		4.4	0.7	X		
						5.4	0.7			
						5.1	0.8			
						4.6	0.6			
						5.1	0.7			
						3.7	0.7			
						5.4	0.8			
						5.4	0.6			
						4.4	0.7			
						5.5	0.7			
						4.9	0.7			
						5.2	0.6			
					Average	4.925	0.691666667			
					Standard Deviation	0.547929989	0.066855792			
201	Popov	17.7	102.3	16.6		5.6	0.7	X		
						5.5	0.7			
						5	0.6			
						6.6	0.8			
						8.9	0.9			
						6.4	0.8			
						6	1.1			
						6.3	0.9			
						5.6	0.7			
						4.8	0.7			
						5.2	0.8			
						6	0.8			
					Average	5.991666667	0.791666667			
					Standard Deviation	1.073192631	0.131137217			
202		14.8	109.4	12.6		5	0.6	X		

						5	0.5			
						6.2	0.6			
						6.3	0.5			
						7.2	0.6			
						9.4	0.6			
						4.9	0.5			
						5.4	0.4			
						5.2	0.5			
						4.3	0.5			
						6.4	0.6			
						5.7	0.6			
					Average	5.91666667	0.54166667			
					Standard Deviation	1.361705704	0.066855792			
203		11.9	106.5	14.4		4.1	0.6	X		
						3.9	0.5			
						4.2	0.5			
						4.1	0.5			
						3	0.5			
						3.6	0.6			
						5	0.5			
						5.6	0.5			
						3.9	0.6			
						4	0.5			
						4.3	0.4			
						4	0.6			
					Average	4.14166667	0.525			
					Standard Deviation	0.65011654	0.062158156			
204		9.3	106.9	12.6		5.6	0.7	X		
						5.1	0.7			
						5.2	0.7			
						5.5	0.5			
						6.8	0.8			
						4.4	0.6			
						4.7	0.6			

						3.7	0.5			
						4	0.6			
						4.7	0.6			
						6.2	0.5			
						4.5	0.8			
					Average	5.033333333	0.633333333			
					Standard Deviation	0.894765925	0.107308674			
205		4.9	107.8	21.1		4.2	0.4	X		
						3.5	0.5			
						3.6	0.6			
						4	0.4			
						4.3	0.5			
						4.3	0.5			
						3.5	0.5			
						5	0.4			
						6	0.4			
						3.6	3.2			
						4.4	0.2			
						4.7	0.7			
					Average	4.258333333	0.691666667			
					Standard Deviation	0.73169583	0.799384233			
206		6.2	105.0	17.8		5.2	0.7	X		
						5.4	0.6			
						5.8	1			
						4.2	0.7			
						4.3	0.6			
						4	0.8			
						5.5	0.7			
						4.9	0.6			
						3.7	0.4			
						5.2	0.8			
						3.6	0.8			
						5.6	0.8			
					Average	4.783333333	0.708333333			

				Standard Deviation	0.781412862	0.150504203			
207		3.0	107.1	16.2	2.9	0.5	X		
					4.8	0.4			
					4.3	0.5			
					4.9	0.4			
					3.9	0.4			
					3.6	0.4			
					3.3	0.5			
					3.3	0.6			
					4.2	0.6			
					4.6	0.5			
					2.5	0.6			
					4.3	0.4			
				Average	3.883333333	0.483333333			
				Standard Deviation	0.767325145	0.083484711			
208		6.0	112.3	14.4	7.3	1	X		
					8	0.7			
					7.4	0.8			
					8	0.7			
					5.1	0.9			
					5.8	0.9			
					4.5	0.6			
					5	0.6			
					5.1	0.5			
					5.7	0.9			
					6.1	0.9			
					4.8	0.5			
				Average	6.066666667	0.75			
				Standard Deviation	1.280861453	0.173205081			
209	Vivani	5.2	116.9	27.1	3.7	0.4	X		
					4.6	0.5			
					4.7	0.6			
					6	0.7			

						5.7	0.5			
						4	0.5			
						3.7	0.5			
						4.5	0.5			
						3.2	0.6			
						3.6	0.6			
						3.5	0.5			
						3.6	0.6			
					Average	4.233333333	0.541666667			
					Standard Deviation	0.890692614	0.079296146			
210		13.9	115.2	21.6		6.6	0.6	X		
						7.3	0.5			
						4.3	0.6			
						4.3	0.6			
						4.7	0.4			
						5.5	0.4			
						9.2	0.6			
						6.1	0.5			
						5.2	0.5			
						5.5	0.5			
						7.4	0.5			
						6.1	0.5			
					Average	6.016666667	0.516666667			
					Standard Deviation	1.44211545	0.071774056			
211		11.7	112.1	12.1		8.2	0.7	X		
						10.5	1			
						10.2	1.1			
						7.9	0.5			
						10	0.9			
						10	0.6			
						9.6	0.9			
						9.8	0.8			
						7.2	0.6			
						7.8	0.6			

						8	0.8			
						10.2	0.8			
					Average	9.116666667	0.775			
					Standard Deviation	1.186923704	0.181533869			
212		17.5	115.9	23.8		4.5	0.4	X		
						6.3	0.5			
						4.5	0.4			
						4.1	0.6			
						5.1	0.4			
						4.3	0.4			
						5.2	0.4			
						5.7	0.6			
						5.3	0.6			
						4.1	0.3			
						5.1	0.5			
						5	0.5			
					Average	4.933333333	0.466666667			
					Standard Deviation	0.666515134	0.098473193			
213		19.1	112.0	13.8		5.8	0.6	X		
						7.3	0.5			
						6.9	0.7			
						6.5	0.6			
						6.8	0.6			
						7.8	0.6			
						6.7	0.6			
						6.5	0.7			
						6.2	0.6			
						6.8	0.4			
						6.8	0.5			
						5	0.4			
					Average	6.591666667	0.566666667			
					Standard Deviation	0.708979206	0.098473193			
214		18.3	118.3	34.8		5.4	0.5	X		

						6.2	0.5			
						7.4	0.7			
						4.5	0.4			
						3.7	0.4			
						3.5	0.4			
						5.2	0.4			
						4.4	0.4			
						3.3	0.3			
						3.7	0.3			
						3.8	0.4			
						5.3	0.3			
					Average	4.7	0.416666667			
					Standard Deviation	1.242431633	0.111464086			
215		24.0	120.4	15.7		6	0.5	X		
						4.4	0.5			
						6.3	0.9			
						5.1	0.3			
						4.9	0.4			
						5.1	0.5			
						6.5	0.5			
						5.4	0.5			
						2.4	0.4			
						3.6	0.4			
						3.1	0.4			
						4	0.4			
					Average	4.733333333	0.475			
					Standard Deviation	1.278019301	0.148477118			
216		26.4	111.7	10.6		4.5	0.5	X		
						4.8	0.5			
						4.3	0.3			
						4.4	0.5			
						5.5	0.8			
						5	5			
						3.7	0.5			

						4.5	0.5			
						4.5	0.6			
						4.5	0.5			
						4.9	0.5			
						4.6	0.6			
					Average	4.6	0.9			
				Standard Deviation		0.434845845	1.29614814			
217	S. Innes	27.6	117.2	32.6		5	0.6	X		
						2.7	0.5			
						3.3	0.3			
						4.3	0.3			
						3.3	0.3			
						2.9	0.4			
						3.4	0.4			
						3.2	0.2			
						2.1	0.3			
						2.7	0.3			
						3.6	0.4			
						3.7	0.4			
					Average	3.35	0.366666667			
				Standard Deviation		0.765743845	0.107308674			
218		24.4	112.1	30.6		5.3	0.7	X		
						4.9	0.4			
						4.7	0.7			
						4.6	0.6			
						5.5	0.6			
						5.2	0.5			
						4.2	0.4			
						5.3	0.5			
						4.4	0.5			
						5.6	0.6			
						5.8	0.8			
						3.4	0.4			
					Average	4.908333333	0.558333333			

				Standard Deviation	0.686835078	0.131137217			
219	29.8	114.0	15.5		4.8	0.5	X		
					1.7	0.4			
					1.9	0.4			
					2.1	0.4			
					1.7	0.3			
					3.9	0.4			
					3.4	0.4			
					3.1	0.6			
					1.5	0.2			
					2.7	0.4			
					1.7	0.4			
					2.4	0.5			
				Average	2.575	0.408333333			
				Standard Deviation	1.037588989	0.099620492			
220	31.9	112.4	28.5		4.6	0.5	X		
					5.4	0.7			
					2.2	0.4			
					4.1	0.4			
					3.7	0.4			
					2.9	0.4			
					4.3	0.5			
					3.7	0.4			
					5	0.5			
					4.6	0.5			
					3.3	0.3			
					4.1	0.4			
				Average	3.991666667	0.45			
				Standard Deviation	0.899957911	0.1			
221	37.4	110.1	17.3		2.2	0.3			
					1.6	0.2			
					5.5	0.4			
					6.7	0.4			

						4.8	0.4			
						3.5	0.4			
						4.3	0.3			
						4.6	0.3			
						2.7	0.3			
						2.1	0.3			
						4.6	0.4			
						5	0.3			
					Average	3.96666667	0.333333333			
					Standard Deviation	1.55290539	0.065133895			
222		33.8	118.8	28		2.3	0.5	X		
						1.4	0.4			
						1	0.3			
						1.1	0.2			
						1.8	0.3			
						3.3	0.4			
						2.3	0.3			
						2.4	0.3			
						1.1	0.3			
						2.6	0.4			
						1.4	0.4			
						1.2	0.3			
					Average	1.825	0.341666667			
					Standard Deviation	0.741160024	0.079296146			
223	Rover	44.7	114.1	27.1		1.2	0.2	X		
						3	0.3			
						3.3	0.6			
						1.4	0.2			
						1.2	0.2			
						2.6	0.4			
						4	0.4			
						5.8	0.6			
						1.3	0.3			
						1.1	0.3			

						0.3	0.2			
						1	0.3			
					Average	2.183333333	0.333333333			
					Standard Deviation	1.593072123	0.143548113			
224		42.0	119.7	11.2		0.5	0.2	X		
						1.4	0.3			
						3.8	0.4			
						1.5	0.4			
						2.3	0.3			
						3	0.3			
						3.7	0.4			
						2.2	0.3			
						4.7	0.5			
						1	0.2			
						0.5	0.2			
						0.1	0.2			
					Average	2.058333333	0.308333333			
					Standard Deviation	1.484133254	0.099620492			
225		44.2	119.3	16.1		1.7	0.2	X		
						1.6	0.3			
						2.2	0.4			
						0.7	0.2			
						0.2	0.3			
						0.9	0.2			
						0.5	0.2			
						2.3	0.2			
						0.9	0.2			
						2.5	0.3			
						1.8	0.3			
						4.2	0.6			
					Average	1.625	0.283333333			
					Standard Deviation	1.104638978	0.119341628			
226		47.2	112.7	14.8		4.8	0.5	X		

						1.7	0.1			
						0.8	0.1			
						1.4	0.2			
						4.4	0.5			
						2.7	0.3			
						0.6	0.1			
						0.8	0.1			
						4.8	0.4			
						4.3	0.4			
						2	0.1			
						1.7	0.3			
					Average	2.5	0.258333333			
					Standard Deviation	1.640399065	0.162135372			
227		49.5	119.4	12.5		0.2	0.1	X		
					<0.01	0	0.1			
						1.9	0.3			
						1.3	0.3			
						0.3	0.2			
						0.7	0.3			
						1.2	0.3			
						2.8	0.3			
						2	0.3			
						2.8	0.3			
						0.7	0.2			
						2.2	0.2			
					Average	1.341666667	0.241666667			
					Standard Deviation	0.989451945	0.079296146			
228		53.0	113.9	18.1		0.4	0.1	X		
						1.7	0.2			
						1.3	0.2			
						2.5	0.3			
						3.8	0.5			
						3	0.4			
						2.4	0.4			

						1.4	0.2			
						0.6	3			
						0.1	0.1			
						0.3	0.2			
						0.9	0.2			
					Average	1.533333333	0.483333333			
					Standard Deviation	1.175765386	0.802080628			
229		55.4	112.8	16.6		1	0.1	X		
						2.6	0.2			
						0.2	0.2			
						0.6	0.1			
						1.4	0.2			
						2.2	0.1			
						0.3	0.2			
						1.6	0.2			
						7.6	0.9			
						4.4	0.4			
						4.3	0.3			
						0.8	0.3			
					Average	2.25	0.266666667			
					Standard Deviation	2.197312408	0.218812221			
230		68.8	124.3	9		9.2	1.9	X		
						1.8	0.3			
						9.1	0.9			
						3.3	0.8			
						3.2	0.4			
						3.3	0.5			
						1.2	0.2			
						0.2	0.1			
						1.8	0.4			
						1.9	0.4			
						2.7	0.6			
						0.7	0.3			
					Average	3.2	0.566666667			

				Standard Deviation	2.953272453	0.479267117			
231	66.1	125.5	11		3.9	0.3	X		
					0.1	0.1			
					1.6	0.6			
					2.1	0.6			
					1.3	0.1			
					1.2	0.2			
					1.1	0.1			
					0.2	0.1			
					3.7	0.3			
					4.1	0.3			
					5.4	0.5			
					0.6	0.1			
				Average	2.108333333	0.275			
				Standard Deviation	1.73857744	0.195982374			
232	62.7	126.8	17.2		2.3	0.2	X		
					1.5	0.3			
					2.2	0.2			
					0.9	0.3			
					4.3	0.3			
					2.5	0.3			
					3.9	0.5			
					0.6	0.2			
					1.5	0.2			
					2.5	0.3			
					1.8	0.3			
					1.5	0.3			
				Average	2.125	0.283333333			
				Standard Deviation	1.099690039	0.083484711			
233	59.8	122.4	11.6		0.7	0.2	X		
					1.4	0.1			
					8.6	1.4			
					7.8	1.3			

						3.1	0.2			
						0.6	0.3			
						5.2	1.2			
						4.7	0.5			
						6.4	1.1			
						3.4	0.3			
						7.6	1			
						1.4	0.3			
					Average	4.241666667	0.658333333			
					Standard Deviation	2.902806897	0.496273996			
234		58.7	124.3	16.4		1.3	0.1	X		
						0.7	0.5			
						0.3	0.2			
						1.7	0			
						7.2	0.8			
						2	0.3			
						0.1	0.3			
						0	0.2			
						0.3	0.3			
						7.2	0.7			
						0.7	0.2			
						3	0.2			
					Average	2.041666667	0.316666667			
					Standard Deviation	2.56566785	0.23677121			
235		56.1	126.2	14.4		0.4	0.3	X		
						0.5	0.1			
						5.8	0.9			
						2.3	0.2			
						5	0.7			
						3.4	0.6			
						1.5	0.4			
						1.8	0.4			
						1.1	0.3			
						1.3	0.2			

						8.1	1.7			
						1.9	0.3			
					Average	2.758333333	0.508333333			
					Standard Deviation	2.378104032	0.439955232			
236		53.0	129.9	16.5		0.6	0.2	X		
						0.7	0.4			
						0.4	0.1			
						0.9	0.2			
						4.4	0.2			
						0.8	0.2			
						1.4	0.2			
						2.9	0.3			
						2.8	0.2			
						0.5	0.2			
						1	0.4			
						3.5	0.4			
					Average	1.658333333	0.25			
					Standard Deviation	0.070710678	0.1			
237		49.8	123.1	20.5		6	0.4	X		
						2.3	0.2			
						1.4	0.2			
						0.1	0.1			
						4.1	0.3			
						5.3	0.4			
						8.2	0.7			
						6.1	0.6			
						0.7	0.3			
						2.1	0.2			
						5.5	0.4			
						0.7	0.2			
					Average	3.541666667	0.333333333			
					Standard Deviation	2.658249025	0.177525073			
238		55.5	120.1	10.1		1.8	0.2	X		

						1.7	0.3			
						1.7	0.2			
						0.8	0.3			
						3.2	0.3			
						2.2	0.4			
						4.4	1.3			
						2.7	0.4			
						1.7	0.3			
						1.4	0.2			
						2.5	0.3			
						1.4	0.3			
					Average	2.125	0.375			
					Standard Deviation	0.965895722	0.298861476			
239		61.7	115.8	11.5		7.1	1.1	X		
						6.9	0.9			
						0.5	0.3			
						2.7	0.3			
						1.2	0.3			
						1.5	0.3			
						0.8	0.2			
						2.2	0.4			
						0.3	0.2			
						1.8	0.3			
						1	0.3			
						8.5	1.2			
					Average	2.875	0.483333333			
					Standard Deviation	2.893919959	0.361394605			
240		68.4	118.4	8.5		2.4	0.4	X		
						1.4	0.2			
						0	0.1			
						3.4	0.5			
						5.6	1.3			
						2.7	0.3			
						1.1	0.1			

						0.2	0.2			
						3.2	0.3			
						1.1	0.1			
						3.5	0.5			
						4.3	0.8			
					Average	2.408333333	0.4			
					Standard Deviation	1.699442868	0.351619629			
241		55.5	120.2	9.7		2	0.4	X		
						2.1	0.6			
						3.4	0.8			
						3.2	0.3			
						6.8	0.8			
						0.9	0.1			
						2.1	0.2			
						1.9	0.5			
						1.6	0.7			
						2.1	0.4			
						3	0.5			
						1.3	0.2			
					Average	2.533333333	0.458333333			
					Standard Deviation	1.535242553	0.235326981			
242		63.7	119.8	9.2		2.7	0.2	X		
						1.2	0.1			
						5.6	0.8			
						14.4	4.5			
						14.7	5.3			
						5.2	0.3			
						2.7	0.5			
						3.3	0.5			
						2.1	0.3			
						12.2	4.9			
						0.7	0.3			
						1	0.1			
					Average	5.483333333	1.483333333			

				Standard Deviation	5.245748639	2.076199909			
243	47.0	127.2	16.1		0.3	0.2	X		
					0.3	0.3			
					1.5	0.3			
					1.6	0.4			
					2.4	0.3			
					3.1	0.5			
					3.5	0.3			
					4.3	0.5			
					0.2	0.2			
					0.2	0.3			
					0.7	0.2			
					1.3	0.4			
				Average	1.616666667	0.325			
				Standard Deviation	1.414106421	0.105528971			
244	47.2	121.1	13.1		0.6	0.2	X		
					0.8	0.2			
					2.8	0.5			
					3.3	0.5			
					1.3	0.5			
					0.4	0.2			
					1.6	0.4			
					2.5	0.4			
					0.1	0.2			
					1	0.2			
					1.1	0.4			
					3.1	0.4			
				Average	1.55	0.341666667			
				Standard Deviation	1.103300833	0.131137217			
245	43.3	126.6	19.4		1.5	0.3	X		
					1.4	0.4			
					1.9	0.3			
					1.9	0.3			

						1.8	0.4			
						0.9	0.4			
						0.7	0.3			
						1.6	0.3			
						0.1	0.2			
						4.9	0.8			
						2.5	0.3			
						1.1	0.3			
					Average	1.691666667	0.358333333			
					Standard Deviation	1.193511498	0.150504203			
246		37.2	122.7	14.1		1.9	0.4	X		
						0.1	0.2			
						1.1	0.3			
						2	0.3			
						0.7	0.3			
						0.6	0.3			
						0.3	0.1			
						1.9	0.3			
						1.5	0.3			
						1.1	0.3			
						4	0.4			
						3	0.4			
					Average	1.516666667	0.3			
					Standard Deviation	1.137647759	0.085280287			
247		34.1	124.7	19.5		2	0.3	X		
						3.2	0.3			
						3.1	0.4			
						3	0.4			
						3.2	0.4			
						3.2	0.5			
						1.5	0.6			
						2.5	0.4			
						1.4	0.3			
						2.1	0.3			

						1.7	0.5			
						2.3	0.4			
					Average	2.43333333	0.4			
					Standard Deviation	0.695875294	0.095346259			
248		33.0	128.8	23		2.7	0.5	X		
						3.6	0.3			
						3.1	0.4			
						3.2	0.6			
						1.4	0.4			
						4	0.4			
						3.2	0.5			
						2.1	0.3			
						0.9	0.3			
						0.8	0.4			
						3.2	0.5			
						2.9	0.3			
					Average	2.59166667	0.408333333			
					Standard Deviation	1.053529422	0.099620492			
249		39.3	128.1	10.9		1.5	0.4	X		
						2.9	0.2			
						1.6	0.3			
						0.5	0.3			
						1.2	0.4			
						2.6	2.3			
						1.3	0.3			
						0.9	0.4			
						2.6	0.3			
						1.3	0.4			
						2.5	0.4			
						2.9	0.5			
					Average	1.81666667	0.51666667			
					Standard Deviation	0.835391398	0.567023061			
250		41.0	124.5	10		1.6	0.3	X		

						2.9	0.2			
						3.2	0.4			
						2.9	0.4			
						0.7	0.2			
						0.5	0.1			
						0.9	0.2			
						2.7	0.4			
						2.2	0.3			
						3	0.4			
						1.8	0.1			
						2	0.3			
					Average	2.033333333	0.275			
					Standard Deviation	0.949960127	0.113818037			
251		35.2	112.7	23		1.8	0.3	X		
						2.4	0.2			
						2.7	0.2			
						2.2	2.3			
						2.9	0.2			
						2.2	0.1			
						1.7	0.1			
						3.5	0.4			
						2.4	0.3			
						2.2	0.3			
						2.7	0.2			
						3.8	0.2			
					Average	2.541666667	0.4			
					Standard Deviation	0.627344089	0.604528366			
252		34.9	118.0	22.1		2.6	0.3	X		
						2.4	0.3			
						2.9	0.3			
						2.5	0.3			
						1.9	0.2			
						1.2	0.3			
						1.4	0.2			

						1.9	0.3			
						1.4	0.3			
						2.4	0.3			
						3	0.3			
						2.4	0.3			
					Average	2.16666667	0.28333333			
					Standard Deviation	0.598989047	0.038924947			
253		28.8	126.3	13.1		3.5	0.4	X		
						1.4	0.4			
						1.2	0.4			
						0.4	0.4			
						0.1	0.6			
						1.2	0.4			
						1.6	0.5			
						1.5	0.5			
						2.4	0.4			
						1.8	0.6			
						1.4	0.5			
						2	0.5			
					Average	1.54166667	0.46666667			
					Standard Deviation	0.879522942	0.077849894			
254		27.2	124.1	12.2		3.1	0.4	X		
						2.4	0.4			
						3.1	0.3			
						2.9	0.5			
						4.9	0.4			
						3	0.4			
						3.7	0.4			
						2.9	0.4			
						3.8	0.5			
						2.2	0.5			
						4.7	0.4			
						2.3	0.4			
					Average	3.25	0.41666667			

				Standard Deviation	0.874382899	0.057735027			
255	25.1	128.9	13.6	3.3	0.4	X			
				3.1	0.5				
				1.7	0.4				
				1	0.3				
				1.7	0.4				
				1.6	0.4				
				3	0.4				
				3.5	0.4				
				4	0.4				
				2.6	0.4				
				2.9	0.3				
				1.5	0.4				
				Average	2.491666667	0.391666667			
				Standard Deviation	0.990230052	0.051492865			
256	21.1	127.7	14.5	1.6	0.5	X			
				2.1	0.5				
				3.2	0.4				
				2.7	0.5				
				3.2	0.6				
				3.4	0.4				
				2.9	0.4				
				1.8	0.4				
				3.2	0.4				
				2.6	0.5				
				3.2	0.3				
				1.9	0.4				
				Average	2.65	0.441666667			
				Standard Deviation	0.641730615	0.079296146			
257	24.3	124.8	17.5	2.9	0.4	X			
				3.1	0.5				
				3.1	0.3				
				3.4	0.4				

						2.8	0.5			
						2.6	0.4			
						3	0.3			
						1.4	0.5			
						3.5	0.5			
						3.2	0.4			
						2.7	0.4			
						3.2	0.4			
					Average	2.908333333	0.416666667			
					Standard Deviation	0.545157748	0.071774056			
258		29.9	120.8	14.7		2.1	0.3	X		
						2.5	0.3			
						2.2	0.3			
						2.7	0.3			
						3.6	0.3			
						3.3	0.4			
						2.6	0.3			
						4.1	0.4			
						1.7	0.2			
						1.1	0.2			
						1.4	0.3			
						3.2	0.4			
					Average	2.541666667	0.308333333			
					Standard Deviation	0.903989474	0.066855792			
259		27.0	122.1	20.9		3.7	0.4	X		
						5.7	0.5			
						4.4	0.3			
						2.4	0.2			
						6.3	0.4			
						6.1	0.5			
						4.7	0.4			
						3.5	0.4			
						2.3	0.4			
						1.8	0.2			

						7	0.4			
						5.9	0.4			
					Average	4.48333333	0.375			
					Standard Deviation	1.749718592	0.09653073			
260		19.6	125.9	17.9		2.4	0.4	X		
						3.6	0.5			
						4.2	0.5			
						3.6	0.4			
						3.2	0.5			
						2.7	0.4			
						2.1	0.4			
						3.4	0.4			
						3.7	0.4			
						1.3	0.5			
						2	0.4			
						3	0.4			
					Average	2.933333333	0.433333333			
					Standard Deviation	0.849955436	0.049236596			
261		17.1	129.1	16.3		3.4	0.4	X		
						2.7	0.4			
						2.5	0.6			
						3.2	0.4			
						3	0.6			
						3.5	0.5			
						3.8	0.4			
						4.8	0.7			
						2	0.4			
						0.6	0.3			
						2.9	0.4			
						2.7	0.4			
					Average	2.925	0.458333333			
					Standard Deviation	1.020806277	0.116450015			
262		16.7	123.8	12.7		4.1	0.4	X		

						3.4	0.3			
						5	0.5			
						4.5	0.4			
						3.7	0.4			
						2.8	0.4			
						3.1	0.3			
						2.8	0.3			
						3.4	0.4			
						4	0.3			
						2.7	0.3			
						4.7	0.4			
					Average	3.683333333	0.366666667			
					Standard Deviation	0.782575391	0.065133895			
263		14.2	123.2	25.6		4.6	0.3	X		
						4.3	0.3			
						3.2	0.3			
						4.5	0.5			
						3.7	0.3			
						2.8	0.4			
						3.8	0.4			
						4.1	0.4			
						4.4	0.4			
						3.7	0.4			
						3.7	0.4			
						5.1	0.4			
					Average	3.991666667	0.375			
					Standard Deviation	0.637407153	0.062158156			
264	Retch	9.7	123.7	19.5		4.1	0.5	X		
						3.9	0.4			
						4	0.5			
						4.5	0.4			
						3.4	0.4			
						4.3	0.5			
						2.8	0.4			

						4	0.4			
						3.3	0.3			
						4.1	0.3			
						3.8	0.3			
						3.2	0.3			
					Average	3.783333333	0.391666667			
					Standard Deviation	0.502418394	0.079296146			
265		13.5	120.8	26.3		3.2	0.3	X		
						3	0.3			
						2.8	0.3			
						3	0.4			
						3.3	0.3			
						3.6	0.4			
						3.3	0.3			
						2.8	0.4			
						3.8	0.4			
						3.5	0.4			
						3.4	0.3			
						3.6	0.3			
					Average	3.275	0.341666667			
					Standard Deviation	0.325087401	0.051492865			
266		12.1	128.0	12.3		4	0.6	X		
						4.6	0.6			
						3.2	0.6			
						3.7	0.6			
						5.1	0.5			
						3.2	0.6			
						3.7	0.5			
						3.8	0.5			
						4.4	0.5			
						3.8	0.5			
						2.7	0.6			
						3.8	0.5			
					Average	3.833333333	0.55			

				Standard Deviation	0.651338947	0.052223297			
267	10.1	117.7	10.5		5.2	0.4	X		
					3.5	0.5			
					5	0.4			
					3.7	0.3			
					4.7	0.4			
					5	0.4			
					6	0.3			
					5.5	0.4			
					5.7	0.5			
					5.6	0.5			
					4.2	0.4			
					3.9	0.4			
				Average	4.833333333	0.408333333			
				Standard Deviation	0.835935332	0.066855792			
268	7.5	115.9	24.2		5.6	0.4	X		
					5.2	0.5			
					4.8	0.5			
					5.1	0.5			
					4	0.4			
					5.6	0.5			
					5.5	0.4			
					5.1	0.6			
					5.7	0.7			
					6.2	0.4			
					5	0.5			
					6	0.6			
				Average	5.316666667	0.5			
				Standard Deviation	0.58749597	0.095346259			
269	9.1	128.7	19		2.5	0.5	X		
					2.4	0.5			
					1.8	0.3			
					3.4	0.4			

						2.2	0.5			
						3	0.6			
						4	0.7			
						3.8	0.4			
						2.8	0.5			
						3	0.5			
						3.4	0.5			
						3.1	0.5			
					Average	2.95	0.491666667			
					Standard Deviation	0.651571527	0.099620492			
270		5.9	122.7	17.9		3.1	0.4			
						3.4	0.5	X		
						3.8	0.4			
						2.9	0.5			
						3.7	0.4			
						4.2	0.4			
						3.9	0.4			
						3.6	0.4			
						3	0.4			
						3.5	0.4			
						3.5	0.4			
						4.3	0.4			
					Average	3.575	0.416666667			
					Standard Deviation	0.441330633	0.038924947			
271		0.8	123.1	14.3		3.7	0.5	X		
						3.2	0.4			
						3.3	0.3			
						2.9	0.4			
						3.2	0.4			
						3.1	0.4			
						3.4	0.3			
						4.1	0.5			
						4	0.4			
						3.5	0.5			

						2.5	0.4			
						3.2	0.4			
					Average	3.341666667	0.408333333			
					Standard Deviation	0.446111143	0.066855792			
272		2.1	110.2	21.7		5.4	0.6	X		
						5.6	0.5			
						6.6	0.8			
						5.8	0.7			
						5.2	0.7			
						5	0.5			
						4.3	0.6			
						3.4	0.5			
						3.6	0.3			
						4.7	0.4			
						4.6	0.7			
						4.9	0.6			
					Average	4.925	0.575			
					Standard Deviation	0.902647621	0.142222617			
273	Ctesibius	0.9	118.4	35.4		4.2	0.5	X		
						3.9	0.4			
						3.9	0.4			
						3.7	0.4			
						5	0.6			
						3.5	0.4			
						3.9	0.5			
						3.9	0.4			
						4.1	0.4			
						4.2	0.3			
						3.8	0.3			
						3.6	0.4			
					Average	3.975	0.416666667			
					Standard Deviation	0.388762606	0.083484711			
274		0.5	131.7	19.4		3.1	0.5	X		

						3.6	0.7			
						3.4	0.5			
						3.8	0.8			
						3.6	0.5			
						4.1	0.6			
						3.6	0.6			
						2.4	0.3			
						3.6	0.5			
						3.3	0.4			
						3.5	0.4			
						3.2	0.6			
					Average	3.433333333	0.533333333			
					Standard Deviation	0.420677664	0.137068883			
275	Morrison	3.9	136.6	16.1		1.6	0.4	X		
						1.4	0.4			
						0.7	0.4			
						0.2	0.4			
						0	0.4			
						1.3	0.4			
						1	0.6			
						0.6	0.3			
						1.6	0.3			
						0.2	0.3			
						0.6	0.3			
						0.3	0.4			
					Average	0.791666667	0.383333333			
					Standard Deviation	0.574390322	0.083484711			
276		2.3	131.5	15		2.1	0.5	X		
						1.5	0.5			
						2.7	0.5			
						4.3	0.5			
						3.7	0.5			
						3.3	0.4			
						2.9	0.4			

						2.7	0.5			
						2.5	0.4			
						3	0.5			
						3.8	0.4			
						3.6	0.5			
					Average	3.008333333	0.466666667			
					Standard Deviation	0.784460826	0.049236596			
277		9.2	130.7	23		1.5	0.3	X		
						1.9	0.4			
						1.9	0.6			
						2.9	0.3			
						2.1	0.4			
						2.7	0.4			
						2.4	0.5			
						2.7	0.4			
						2.5	0.5			
						1.8	0.4			
						2	0.6			
						1.1	0.4			
					Average	2.125	0.433333333			
					Standard Deviation	0.534492112	0.098473193			
278		5.5	128.5	10.5		2.9	0.4	X		
						3.6	0.5			
						3	0.6			
						2.7	0.6			
						4.3	0.5			
						3.7	0.5			
						4	0.5			
						3.1	0.5			
						3.7	0.6			
						3.1	0.5			
						2.9	0.5			
						3.7	0.5			
					Average	3.391666667	0.516666667			

				Standard Deviation	0.505350164	0.057735027			
279	Bergman	7.0	127.3	20.5	1.8	0.4	X		
					2	0.4			
					0	0.4			
					1	0.4			
					1.4	0.4			
					1.2	0.4			
					2.1	0.4			
					1.1	0.4			
					1.8	0.3			
					0.3	0.4			
					1.4	0.4			
					2.4	0.3			
				Average	1.375	0.383333333			
				Standard Deviation	0.714938014	0.038924947			
280	Mendeleev	2.4	139.6	27.9	1.2	0.9	X		
					1.6	0.3			
					2	0.5			
					1.7	0.4			
					1.4	0.4			
					1.6	0.4			
					1.3	0.5			
					1.5	0.5			
					2.7	0.4			
					2.2	0.4			
					2.7	0.4			
					0.9	0.3			
				Average	1.733333333	0.45			
				Standard Deviation	0.566220859	0.15666989			
281		14.0	131.4	17	5.8	0.4	X		
					2.6	0.4			
					3.6	0.5			
					2.9	0.3			

						2.7	0.5			
						5.1	0.6			
						3.5	0.5			
						3.7	0.6			
						2.4	0.5			
						3.9	0.5			
						3.8	0.6			
						2.8	0.5			
					Average	3.566666667	0.491666667			
					Standard Deviation	1.027205683	0.090033664			
282		9.7	133.9	33.1		4	0.3	X		
						1.8	0.4			
						2.8	0.4			
						2.2	0.4			
						2.3	0.4			
						3.2	0.5			
						2.5	0.3			
						1.7	0.4			
						1.5	0.4			
						1.9	0.4			
						2.2	0.3			
						1.9	0.5			
					Average	2.333333333	0.391666667			
					Standard Deviation	0.711379369	0.066855792			
283		15.3	127.3	10.8		4	0.4	X		
						3.6	0.6			
						2.6	0.4			
						3.5	0.5			
						5	0.7			
						3.8	0.3			
						3.7	0.4			
						4.1	0.4			
						3.7	0.5			
						3.2	0.4			

						2.8	0.5			
						3.1	0.6			
					Average	3.591666667	0.475			
					Standard Deviation	0.638831794	0.113818037			
284		14.2	134.1	14.5		2.1	0.4	X		
						2.8	0.6			
						2.4	0.4			
						2	0.4			
						1.4	0.3			
						1.3	0.4			
						2.5	0.4			
						2.9	0.5			
						1.9	0.4			
						2.9	0.6			
						2.8	0.5			
						2	0.4			
					Average	2.25	0.441666667			
					Standard Deviation	0.558406825	0.090033664			
285		12.4	139.7	15.1		1.5	0.4	X		
						2.4	0.5			
						3	0.3			
						1.4	0.6			
						2.6	0.4			
						2.5	0.4			
						2.1	0.5			
						2.3	0.5			
						2.8	0.6			
						1.5	0.4			
						2.6	0.4			
						2.4	0.5			
					Average	2.258333333	0.458333333			
					Standard Deviation	0.529937103	0.090033664			
286		20.0	134.9	31.9		1.3	0.3	X		

						1	0.3			
						1.6	0.4			
						1.2	0.4			
						1	0.3			
						2	0.4			
						2.1	0.2			
						1.6	0.3			
						1.1	0.2			
						0.9	0.4			
						1.5	0.2			
						2	0.4			
					Average	1.441666667	0.316666667			
					Standard Deviation	0.425245027	0.083484711			
287		17.7	136.4	23.9		1.7	0.4	X		
						2	0.4			
						1.1	0.4			
						2.7	0.3			
						2.2	0.6			
						1.9	0.4			
						0.7	0.5			
						0.8	0.4			
						1.6	0.3			
						2.1	0.4			
						2.5	0.4			
						1	0.3			
					Average	1.691666667	0.4			
					Standard Deviation	0.66395281	0.085280287			
288		17.3	133.6	13.8		1.9	0.4	X		
						2.2	0.6			
						1.7	0.5			
						2.6	0.5			
						4.3	0.6			
						2	0.4			
						2.1	0.5			

						1.4	0.4			
						1.9	0.4			
						1.7	0.4			
						1.8	0.4			
						2.3	0.4			
					Average	2.158333333	0.458333333			
					Standard Deviation	0.744016536	0.079296146			
289		20.0	132.0	25		1.8	0.3	X		
						0.9	0.3			
						0.9	0.2			
						3	0.6			
						1.6	0.3			
						0.9	0.3			
						1.9	0.3			
						2.1	0.2			
						2.5	0.3			
						1.4	0.2			
						0.6	0.4			
						2.1	0.3			
					Average	1.641666667	0.308333333			
					Standard Deviation	0.73169583	0.108362467			
290		27.2	133.5	14.9		2.4	0.5	X		
						1.6	0.6			
						0.2	0.4			
						1.2	0.6			
						3.1	0.3			
						3.2	0.5			
						1.3	0.5			
						4.9	0.6			
						2.9	0.5			
						3.1	0.5			
						3	0.5			
						1.9	0.6			
					Average	2.4	0.508333333			

				Standard Deviation	1.238033632	0.090033664			
291	23.7	135.4	16.6		1.6	0.3	X		
					2.2	0.2			
					2	0.5			
					1.7	0.3			
					2.2	0.4			
					1.7	0.3			
					2.9	0.3			
					0.2	0.3			
					1.8	0.5			
					2	0.4			
					2.5	0.6			
					2	0.4			
				Average	1.9	0.375			
				Standard Deviation	0.649475313	0.113818037			
292	28.6	139.7	10.6		0.5	0.3	X		
					3.8	0.4			
					1.5	0.3			
					2	0.5			
					0.3	0.3			
					0.4	0.3			
					0.3	0.3			
					1.4	0.4			
					1.3	0.4			
					1.3	0.3			
					3.3	0.6			
					2.9	0.3			
				Average	1.583333333	0.366666667			
				Standard Deviation	1.199873731	0.098473193			
293	29.2	136.6	9		2.4	0.4	X		
					0.8	0.4			
					2.6	0.4			
					1.9	0.4			

						0.3	0.3			
						2.1	0.4			
						1.2	0.4			
						2.7	0.5			
						4	0.4			
						2.6	0.4			
						1.3	0.3			
						0.9	0.4			
					Average	1.9	0.391666667			
					Standard Deviation	1.041851499	0.051492865			
294		28.8	133.1	12.1		1.3	0.2	X		
						1.1	0.3			
						1.1	0.4			
						0.4	0.3			
						0.6	0.4			
						1.3	0.3			
						0.4	0.3			
						2.1	0.4			
						0.6	0.2			
						0.9	0.3			
						0	0.3			
						1.2	0.3			
					Average	0.916666667	0.308333333			
					Standard Deviation	0.557320429	0.066855792			
295		23.1	139.7	12.1		1.3	0.2	X		
						1.1	0.3			
						1.1	0.4			
						0.4	0.3			
						0.6	0.4			
						1.3	0.3			
						0.4	0.3			
						2.1	0.4			
						0.6	0.2			
						0.9	0.3			

						0	0.3			
						1.2	0.3			
					Average	0.91666667	0.30833333			
					Standard Deviation	0.557320429	0.066855792			
296		34.2	138.7	19.7		1.1	0.4	X		
						1.3	0.4			
						0.5	0.3			
						1	0.2			
						0.7	0.2			
						0	0.3			
						1.5	0.3			
						0	0.2			
						2.5	0.5			
						1.3	0.5			
						0.2	0.4			
						0.8	0.3			
					Average	0.90833333	0.33333333			
					Standard Deviation	0.7140898	0.107308674			
297	Njiland	33.3	133.9	34.9		2.8	0.4	X		
						2.4	0.4			
						1.9	0.6			
						4.5	0.9			
						3.2	0.5			
						1.3	0.4			
						0.3	0.4			
						1.4	0.5			
						1.6	0.3			
						0.6	0.3			
						0.9	0.3			
						3.7	0.5			
					Average	2.05	0.45833333			
					Standard Deviation	1.294393505	0.167648622			
298		36.3	134.4	28		2.6	0.3	X		

						3.7	0.4			
						1.3	0.3			
						1.3	0.3			
						2.4	0.6			
						2.8	0.3			
						3.7	0.4			
						2	0.3			
						2.6	0.4			
						1.7	0.3			
						2.5	0.3			
						2	0.3			
					Average	2.383333333	0.35			
					Standard Deviation	0.789514619	0.090453403			
299		36.4	137.7	13.5		1.1	3.3	X		
						2.2	0.4			
						2.9	0.3			
						1.7	0.3			
						3.2	0.4			
						1.8	0.3			
						1.1	0.4			
						1.5	0.3			
						1	0.3			
						1	0.3			
						2.6	0.2			
						1.7	0.4			
					Average	1.816666667	0.575			
					Standard Deviation	0.758986565	0.860364616			
300		37.7	131.0	16.2		2.5	0.2	X		
						1.6	0.2			
						1.1	0.2			
						2.6	0.4			
						1.3	0.6			
						1.2	0.4			
						2.1	0.3			

						1.4	0.1			
						2.5	0.5			
						1.8	0.3			
						0.7	0.3			
						2.3	0.4			
					Average	1.758333333	0.325			
					Standard Deviation	0.635979321	0.142222617			
301		41.0	132.6	25.1		2.1	0.3	X		
						0.6	0.5			
						1.6	0.3			
						4.8	0.8			
						1.4	0.6			
						2.3	0.7			
						1.7	0.6			
						3.4	0.4			
						1.3	0.4			
						0.9	0.3			
						1.3	0.3			
						0.8	0.3			
					Average	1.85	0.458333333			
					Standard Deviation	1.199621152	0.178164037			
302		31.1	138.7	20		0.9	0.4	X		
						1	0.3			
						1.3	0.3			
						2.4	0.4			
						3.9	0.5			
						1.2	0.3			
						0.1	0.4			
						2	0.4			
						2	0.4			
						1.6	0.3			
						1.8	0.5			
						0.6	0.4			
					Average	1.566666667	0.383333333			

				Standard Deviation	0.982883821	0.071774056			
303	38.2	137.9	27		3.1	0.3	X		
					2	0.3			
					0.4	0.4			
					1.4	0.4			
					2.6	0.4			
					2.4	0.4			
					1	0.2			
					1	0.3			
					3.2	0.4			
					1.6	0.3			
					2.8	0.4			
					3	0.5			
				Average	2.041666667	0.358333333			
				Standard Deviation	0.947204819	0.079296146			
304	39.1	140.7	12		0.4	0.5	X		
					2.3	0.4			
					0.7	0.3			
					3.7	0.5			
					0.3	0.2			
					1.3	0.4			
					3.5	0.6			
					3.1	0.2			
					2	0.4			
					4.2	0.4			
					0.5	0.2			
					5.1	0.7			
				Average	2.258333333	0.4			
				Standard Deviation	1.65059677	0.159544807			
305	41.3	139.8	15.6		1.7	0.4	X		
					3.9	0.6			
					4	0.5			
					2.2	0.4			

						0.1	0.4			
						0.7	0.4			
						5.5	0.6			
						2.1	0.3			
						2.2	0.6			
						0.4	0.3			
						3.7	0.6			
						1.6	0.3			
					Average	2.341666667	0.45			
					Standard Deviation	1.638989896	0.124316312			
306		45.0	134.5	18.2		4	0.6	X		
						6.6	0.8			
						3.7	0.7			
						3.4	0.4			
						3.3	0.3			
						2	0.3			
						2.1	0.4			
						0.8	0.2			
						1.4	0.2			
						0.4	0.2			
						0.2	0.3			
						1.6	0.3			
					Average	2.458333333	0.391666667			
					Standard Deviation	1.832761619	0.202072594			
307		42.6	138.4	12.6		3.5	0.5	X		
						3	0.4			
						1.4	0.4			
						1.6	0.3			
						1.5	0.2			
						1.4	0.4			
						2.7	0.4			
						2.5	0.3			
						2.7	0.4			
						2	0.5			

						0.6	0.3			
						1.5	0.3			
					Average	2.033333333	0.366666667			
					Standard Deviation	0.842435143	0.088762536			
308		44.6	139.0	15		2.1	0.9	X		
						1.4	0.2			
						2.4	0.3			
						1.3	0.3			
						2.1	0.4			
						1.7	0.3			
						1.7	0.3			
						1.7	0.4			
						2.2	0.5			
						4.6	0.4			
						4.4	0.8			
						0.5	0.2			
					Average	2.175	0.416666667			
					Standard Deviation	1.196301117	0.220879784			
309		43.0	130.7	14.8		2.6	0.4	X		
						3	0.3			
						2.6	0.4			
						1.8	0.3			
						2	0.5			
						2.5	0.4			
						5.3	0.5			
						4.3	0.8			
						2	0.3			
						1.6	0.3			
						2.7	0.5			
						1.7	0.4			
					Average	2.675	0.425			
					Standard Deviation	1.106283705	0.142222617			
310		47.7	131.5	18		1.7	0.3	X		

						1	0.2			
						0.1	0.2			
						0.7	0.4			
						3.1	0.5			
						0.5	0.3			
						0.8	0.3			
						6.7	0.7			
						1.5	0.5			
						0.4	0.2			
						0.4	0.2			
						0.8	0.4			
					Average	1.475	0.35			
					Standard Deviation	1.831107464	0.15666989			
311		46.4	134.8	12.5		0.4	0.2	X		
						0.4	0.3			
						0	0.3			
						0.1	0.2			
						2.1	0.4			
						3.2	0.3			
						2.9	0.4			
						2.3	0.4			
						0.1	0.3			
						1.2	0.4			
						1.6	0.2			
						0.9	0.3			
					Average	1.266666667	0.308333333			
					Standard Deviation	1.138047238	0.079296146			
312		44.7	122.4	12.5		2.4	0.6	X		
						3.3	0.4			
						2.2	0.4			
						0.7	0.4			
						1	0.3			
						1.4	0.4			
						0.3	0.2			

						0.2	0.3			
						0.6	0.3			
						1.5	0.8			
						1.4	0.3			
						1.5	0.3			
					Average	1.375	0.391666667			
					Standard Deviation	0.914653437	0.162135372			
313		50.2	137.2	11.7		8.1	0.8	X		
Thin Crust ?)						8.9	0.7			
						7.4	0.3			
						4.2	0.8			
						10	0.3			
						7.6	0.2			
						9.4	0.5			
						6.4	0.5			
						11	1			
						8.9	0.7			
						10.5	0.7			
						10.5	0.5			
					Average	8.575	0.583333333			
					Standard Deviation	1.968906018	0.240580107			
314		52.9	136.7	19.7		7.4	0.6	X		
						9.1	0.9			
						4.4	0.5			
						2.1	0.3			
						3.6	0.3			
						1.2	0.2			
						0.4	0.2			
						2	0.2			
						8.2	0.6			
						1.4	0.3			
						3.9	0.4			
						8.7	0.7			
					Average	4.366666667	0.433333333			

				Standard Deviation	3.179289038	0.226969495			
315	50.6	129.6	14.5		0.9	0.2	X		
					1.3	0.3			
					2.2	0.2			
					3.3	0.3			
					2.3	0.2			
					2.1	0.3			
					4.3	0.7			
					5.4	0.6			
					1.3	0.3			
					1.2	0.1			
					1.1	0.3			
					1.1	0.2			
				Average	2.208333333	0.308333333			
				Standard Deviation	1.43365923	0.172986249			
316	54.8	135.3	19.8		1.3	0.6	X		
					7.1	0.3			
					0.6	0.3			
					2.8	0.4			
					0.7	0.2			
					2.2	0.4			
					1.1	0.3			
					1.4	0.2			
					3.6	0.3			
					4.8	0.4			
					2.1	0.3			
					6.8	0.6			
				Average	2.875	0.358333333			
				Standard Deviation	2.26158633	0.131137217			
317	54.6	130.0	14.1		4.6	0.5	X		
					1.9	0.3			
					5.2	0.8			
					4.1	0.5			

						3.9	0.5			
						0.8	0.2			
						0.4	0.2			
						2.6	0.5			
						0.8	0.2			
						1	0.3			
						3.4	0.3			
						2.5	0.3			
					Average	2.6	0.383333333			
					Standard Deviation	1.643720835	0.180067327			
318		56.9	135.7	24		0.7	0.2	X		
						1.1	0.2			
						2.7	0.5			
						2	0.4			
						2.7	0.2			
						3	0.3			
						0.8	0.2			
						2.3	0.2			
						7.9	1.1			
						2.2	0.3			
						6.3	0.8			
						0.4	0.3			
					Average	2.675	0.391666667			
					Standard Deviation	2.265201175	0.284312035			
319		59.1	131.7	12		2.4	0.3	X		
						4.1	0.5			
						1.1	0.4			
						7.7	0.9			
						4.8	0.8			
						4.7	0.6			
						7.9	1.1			
						9.8	2			
						5.5	0.7			
						3.2	0.6			

						5.7	0.8			
						1.8	0.4			
					Average	4.891666667	0.758333333			
					Standard Deviation	2.623827299	0.454189254			
320		62.3	131.6	14.5		1	0.2	X		
						1	0.2			
						3.1	1.1			
						5.1	0.6			
						6.3	0.5			
						1.1	0.3			
						3.1	0.3			
						0.6	0			
						5.4	0.3			
						1.2	0.3			
						2	0.4			
						1.7	0.2			
					Average	2.633333333	0.366666667			
					Standard Deviation	1.97177047	0.277434131			
321		62.7	135.5	12		10.1	1.4	X		
						5.8	0.9			
						1.1	0.3			
						3.7	0.3			
						0.6	0.2			
						6.6	0.5			
						5.8	1			
						5.1	0.8			
						7	0.7			
						9.5	1.1			
						8.7	0.7			
						4.4	0.5			
					Average	5.7	0.7			
					Standard Deviation	2.993022188	0.361813613			
322		67.4	135.5	15.6		2.8	0.1	X		

						3.1	0.4			
						6.9	1.5			
						3.6	0.2			
						10.6	1.4			
						6.7	1.4			
						8.7	2.8			
						10.4	3.4			
						0.2	0.1			
						1.3	0.2			
						1.9	1.2			
						0.6	0.1			
					Average	4.733333333	1.066666667			
					Standard Deviation	3.765473128	1.113008481			
323		64.0	139.8	16.6		0.5	0.1	X		
						0.2	0.1			
						4.6	0.3			
						5.2	0.5			
						6.2	0.8			
						6.8	0.5			
						4.9	0.7			
						3.4	0.3			
						4.6	0.6			
						0.3	0.1			
						2.2	0.2			
						0.6	0.2			
					Average	3.291666667	0.366666667			
					Standard Deviation	2.434023356	0.246182982			
324		67.9	142.9	29.5		1.2	0.2	X		
						2.4	0.8			
						1.5	0.1			
						6.3	0.8			
						11.7	1.7			
						4.4	0.3			
						1.7	0.2			

						6.5	0.9			
						11.1	1.9			
						4.3	0.3			
						0.5	0.1			
						1.3	0.2			
					Average	4.408333333	0.625			
					Standard Deviation	3.82538372	0.619567298			
325		66.5	148.3	25.4		1.8	0.2	X		
						4.8	0.6			
						4.8	0.7			
						1.2	0.4			
						0.6	0.2			
						1.2	0.3			
						2.4	0.4			
						0.3	0.2			
						4	0.5			
						6.1	1.1			
						3	0.6			
						1.5	0.3			
					Average	2.641666667	0.458333333			
					Standard Deviation	1.886053279	0.264431924			
326		61.6	145.8	20.5		6.6	1.2	X		
						2.6	0.3			
						1.7	0.3			
						1	0.3			
						4.1	0.3			
						6.9	1.1			
						2.1	0.4			
						2.7	0.3			
						1.7	0.5			
						0.8	0.1			
						2.1	0.2			
						1.6	0.3			
					Average	2.825	0.441666667			

				Standard Deviation	2.024003683	0.344985727			
327	64.0	146.9	9.8		0.5	0.1	X		
					2.7	0.4			
					17.7	6.9			
					17.1	4.3			
					16	4.8			
					7.6	1.6			
					8.6	1.4			
					0.1	0.1			
					0.9	0.2			
					1.2	0.2			
					0.1	0.2			
					5	0.5			
				Average	6.458333333	1.725			
				Standard Deviation	6.926294869	2.30616762			
328	60.4	143.9	23		4.2	0.3	X		
					1.9	0.6			
					4.3	0.4			
					4	0.3			
					1.5	0.2			
					4.4	0.5			
					4.7	0.5			
					4.1	0.6			
					0.2	0.1			
					6.8	0.7			
					0.5	0.2			
					1.9	0.2			
				Average	3.208333333	0.383333333			
				Standard Deviation	1.974131953	0.194624736			
329	62.6	135.4	12.5		5	0.4	X		
					8.6	1.2			
					6.8	0.7			
					2.5	0.2			

						7.5	1			
						3.3	0.4			
						0.7	0.2			
						3.6	0.4			
						4.9	0.6			
						1.3	0.3			
						5.4	0.4			
						3.5	0.4			
					Average	4.425	0.516666667			
					Standard Deviation	2.415527422	0.309936455			
330		58.1	144.1	22.8		4.4	0.5	X		
						1.3	0.4			
						3.4	0.4			
						4.2	0.4			
						0.8	0.3			
						1.2	0.2			
						2.2	0.2			
						0	0.2			
						0.3	0.3			
						7	0.6			
						1.5	0.3			
						1.1	0.2			
					Average	2.283333333	0.333333333			
					Standard Deviation	2.070499866	0.130267789			
331		56.1	145.1	23.2		0.3	0.2	X		
						3.1	0.2			
						1.5	0.4			
						0.6	0.3			
						1.6	0.4			
						0.8	0.3			
						5.3	0.6			
						2.2	0.3			
						1.4	0.2			
						1.3	0.3			

						2	0.2			
						1.2	0.5			
					Average	1.775	0.325			
					Standard Deviation	1.339012526	0.128805703			
332		54.9	143.5	12.5		0.6	0.1	X		
						1.5	0.3			
						1	0.2			
						1.3	0.1			
						5.7	0.5			
						0.9	1.2			
						7.4	0.7			
						4.6	0.5			
						1.3	0.2			
						0.2	0.2			
						1	0.3			
						2.6	0.4			
					Average	2.341666667	0.391666667			
					Standard Deviation	2.300378757	0.311764285			
333		51.2	146.9	13.5		1.8	0.1	X		
						5.2	0.8			
						1.2	0.3			
						4.3	0.6			
						3.2	0.6			
						5.2	0.7			
						3	0.5			
						0.2	0.2			
						1.7	0.5			
						4.6	0.7			
						2.8	0.4			
						1.4	0.3			
					Average	2.883333333	0.475			
					Standard Deviation	1.668332501	0.217944947			
334		53.7	144.5	17.6		0.9	0.2	X		

						1.5	0.6			
						2.9	0.5			
						3.1	0.4			
						8.5	0.8			
						9.8	1.2			
						6.3	0.8			
						2	0.4			
						0.1	0.3			
						1.4	0.3			
						2.5	0.3			
						1.3	0.3			
					Average	3.358333333	0.508333333			
					Standard Deviation	3.128013698	0.293747985			
335		49.7	141.6	12		8.1	0.6	X		
						1.8	0.4			
						1.7	0.2			
						5.1	0.8			
						6.1	0.6			
						1.6	0.4			
						3.8	0.8			
						1.5	0.3			
						8.2	0.7			
						11.7	0.6			
						6.6	0.5			
						4	0.3			
					Average	5.016666667	0.516666667			
					Standard Deviation	3.245929852	0.199240984			
336		51.3	149.8	13.5		4.5	0.7	X		
						4.9	0.5			
						8	0.9			
						3.8	0.6			
						2.3	0.6			
						5.6	0.9			
						2	0.8			

						6.5	1.3			
						7.1	1			
						7.3	0.4			
						2.6	1.1			
						2.8	0.8			
					Average	4.783333333	0.8			
					Standard Deviation	2.11781763	0.259369866			
337		45.7	148.8	15		4.2	0.5	X		
						3.2	0.8			
						2.5	0.4			
						4.1	0.7			
						2.5	0.4			
						1.5	0.4			
						1.8	0.5			
						2.3	0.5			
						2.8	0.5			
						3.1	0.7			
						3.6	0.6			
						3.8	0.6			
					Average	2.95	0.55			
					Standard Deviation	0.873342586	0.131425748			
338		47.9	149.9	22.2		3.1	0.4	X		
						3.9	0.5			
						2.9	0.4			
						2.8	0.3			
						3.7	0.5			
						1.7	0.4			
						0.7	0.2			
						1.9	0.4			
						0.9	0.3			
						2.4	0.4			
						0.5	0.3			
						1.2	0.3			
					Average	2.141666667	0.366666667			

				Standard Deviation	1.166547613	0.088762536			
339	49.5	150.4	11.8		3.1	0.5	X		
					1.7	0.9			
					3.2	0.5			
					1.2	0.3			
					1.6	0.2			
					4.8	0.6			
					2	0.4			
					2.5	0.4			
					4.2	0.7			
					3	0.4			
					1.1	0.2			
					1.9	0.4			
				Average	2.525	0.458333333			
				Standard Deviation	1.167067031	0.202072594			
340	45.4	145.9	13.2		5.6	0.7	X		
					2.7	0.4			
					3.2	0.5			
					2.6	0.4			
					1.2	0.3			
					0.6	0.3			
					0.7	0.4			
					3.7	0.5			
					2.8	0.4			
					3	0.6			
					2.4	0.4			
					5.4	0.7			
				Average	2.825	0.466666667			
				Standard Deviation	1.584656544	0.137068883			
341	41.7	172.4	11.1		1.3	0.4	X		
					2.4	0.3			
					3.7	0.4			
					4.4	0.6			

						1.3	0.3			
						3.2	0.4			
						3.6	0.4			
						0.5	0.3			
						1.5	0.3			
						4.3	0.5			
						5.4	0.7			
						5.3	0.5			
					Average	3.075	0.425			
					Standard Deviation	1.655912273	0.128805703			
342		46.7	145.3	20		2.1	0.4	X		
						0.8	0.4			
						5.1	0.9			
						1.5	0.4			
						4.1	0.6			
						3.2	0.6			
						0.8	0.4			
						2.7	0.4			
						3.2	0.4			
						1.8	0.4			
						1.3	0.4			
						9.4	1.6			
					Average	3	0.575			
					Standard Deviation	2.408696366	0.357071421			
343		46.8	142.2	7.5		3.3	0.4	X		
		undersize crater				3	0.5			
						3	0.6			
						2.1	0.3			
						1.1	0.3			
						1.8	0.4			
						3.1	0.4			
						2.7	0.3			
						3.2	0.4			
						4	0.6			

						2.1	0.3			
						1.3	0.3			
					Average	2.558333333	0.4			
					Standard Deviation	0.876416602	0.112815215			
344		39.1	140.8	12.1		0.4	0.2	X		
						0.4	0.5			
						0.5	0.1			
						2	0.2			
						1	0.3			
						0.1	0.3			
						1.3	0.4			
						1.8	0.4			
						1.3	1.2			
						0.3	0.2			
						2.9	0.6			
						3.9	1			
					Average	1.325	0.45			
					Standard Deviation	1.161601559	0.337099931			
345		42.9	146.6	9.8		2.7	0.6	X		
						0.4	0.4			
						2.1	0.4			
						2.2	0.5			
						1.2	1.1			
						1.7	0.5			
						1.1	0.3			
						1.8	0.4			
						2.2	0.5			
						4.7	0.9			
						3.4	0.8			
						2.6	0.5			
					Average	2.175	0.575			
					Standard Deviation	1.126640218	0.237888438			
346		35.5	140.4	17		1.1	0.4	X		

					3.1	0.4		
					1.4	0.2		
					2	0.3		
					1.7	0.3		
					1.1	0.3		
					0.1	0.2		
					0.2	0.3		
					1.4	0.5		
					0.6	0.2		
					0.8	0.4		
					3	0.5		
				Average	1.375	0.333333333		
				Standard Deviation	0.88950673	0.107308674		
347		39.8	149.6	16.2	2.7	0.6	X	
					2.8	0.4		
					3.9	0.7		
					3.1	0.5		
					2.8	0.4		
					2.3	0.4		
					2.1	0.5		
					1.5	0.4		
					1.8	0.3		
					1.7	0.3		
					2.4	0.3		
					1.8	0.3		
				Average	2.408333333	0.425		
				Standard Deviation	0.692109205	0.128805703		
348		34.6	145.9	14.5	2.5	0.3	X	
					5.5	0.9		
					4.1	0.5		
					3.6	0.5		
					2.3	0.4		
					1.6	0.4		
					1.9	0.4		

						3.3	0.5			
						7	0.7			
						4.5	0.6			
						3.5	0.4			
						1.2	0.4			
					Average	3.41666667	0.5			
					Standard Deviation	1.691601357	0.165144565			
349		32.1	144.8	17.5		1.9	0.3	X		
						2.3	0.2			
						1.4	0.3			
						1.4	0.3			
						1	0.3			
						0.5	0.3			
						1.3	0.2			
						0.8	0.4			
						1.2	0.4			
						0.7	0.2			
						0.1	0.3			
						1.1	0.4			
					Average	1.14166667	0.3			
					Standard Deviation	0.596136551	0.073854895			
350		37.7	150.7	10		5.8	1.1	X		
						3	0.5			
						4	0.5			
						2.2	0.3			
						4	1.1			
						2.1	0.5			
						1.7	0.5			
						2	0.5			
						1.3	0.4			
						1.7	0.3			
						2.8	0.6			
						3.3	0.6			
					Average	2.825	0.575			

				Standard Deviation	1.290612962	0.263283463			
351	Tereshkova	28.3	143.7	33.2	1.4	0.5	X		
					0.9	0.5			
					1.9	0.5			
					1.9	0.5			
					0.7	0.3			
					0.6	0.3			
					2.2	0.4			
					2.9	0.5			
					0.4	0.3			
					2.1	0.5			
					0.6	0.4			
					1.4	0.4			
				Average	1.416666667	0.425			
				Standard Deviation	0.791814181	0.08660254			
352		33.5	142.9	15.8	1.7	0.4	X		
					0.9	0.4			
					0.1	0.3			
					1.2	0.3			
					1.6	0.4			
					0.9	0.4			
					0.8	0.3			
					1.4	0.3			
					1.4	0.4			
					1.5	0.4			
					2.4	0.5			
					1.3	0.3			
				Average	1.266666667	0.366666667			
				Standard Deviation	0.566220859	0.065133895			
353		28.9	147.2	10.2	13.3	3.1	X		
					10.7	1.6			
					8.5	1			
					10.2	1.6			

						11.4	1.9			
						13.3	2.5			
						14	3.3			
						13.8	3			
						12.8	2.1			
						10.8	1.6			
						8.1	0.9			
						9.6	1.1			
					Average	11.375	1.975			
					Standard Deviation	2.056530618	0.834620218			
354		23.9	144.4	11		9.1	1.4		X	
						7.3	1.3			
						3.5	0.9			
						2.9	0.6			
						8.8	1			
						7.3	0.8			
						5.4	0.9			
						5.8	1.1			
						9.1	1.4			
						4.9	1.2			
						6.1	1.1			
						6.1	1			
					Average	6.358333333	1.058333333			
					Standard Deviation	2.053581498	0.242930343			
355		24.3	149.3	13.7		8.1	1.1		X	
						9.8	1.3			
						13.6	2.4			
						7.7	0.8			
						5.9	1.1			
						7.8	1.3			
						12.6	2.2			
						4.9	0.9			
						8.5	1.3			
						7	1			

						9.8	1.2			
						8.4	0.7			
					Average	8.675	1.275			
					Standard Deviation	2.506400897	0.518958748			
356		22.7	150.6	10.7		1.3	0.2	X		
						2.7	0.2			
						2.9	0.6			
						5.6	0.4			
						3	0.5			
						2.3	0.3			
						3.1	0.6			
						4.6	0.7			
						1.7	0.3			
						1.3	0.2			
						2.2	0.1			
						1.7	0.2			
					Average	2.7	0.358333333			
					Standard Deviation	1.301747078	0.197522534			
357		25.8	140.7	17.3		0.2	0.2	X		
						1.3	0.3			
						0.1	0.3			
						1.3	0.3			
						0	0.3			
						0.1	0.4			
						1.6	0.5			
						0.8	0.4			
						0.9	0.3			
						0.2	0.3			
						0	0.2			
						1.5	0.4			
					Average	0.666666667	0.325			
					Standard Deviation	0.632934484	0.08660254			
358		19.3	140.5	10		0.4	0.2	X		

						2.1	0.4			
						1.5	0.2			
						1.2	0.1			
						1.2	0.3			
						0.4	0.3			
						0	0.3			
						0.4	0.3			
						1.6	0.3			
						1.4	0.4			
						0.6	0.3			
						0.4	0.3			
					Average	0.933333333	0.283333333			
					Standard Deviation	0.647138222	0.083484711			
359		20.0	144.8	14.5		1.8	0.5	X		
						1.3	0.6			
						0.5	0.5			
						1.5	0.5			
						0.1	0.3			
						1.6	0.5			
						1.8	0.4			
						0.4	0.4			
						1.9	0.4			
						1.2	0.6			
						1.1	0.5			
						1.7	0.5			
					Average	1.241666667	0.475			
					Standard Deviation	0.606717447	0.08660254			
360		21.7	150.2	12.7		1.2	0.3	X		
						1.8	0.4			
						1.4	0.3			
						1.1	0.4			
						2.6	0.4			
						1.9	0.3			
						1.9	0.4			

						2.3	0.4			
						3.7	0.5			
						2	0.4			
						3.3	0.4			
						3.5	0.2			
					Average	2.225	0.366666667			
					Standard Deviation	0.881243955	0.077849894			
361		17.8	148.1	12		0.3	0.3	X		
						1.1	0.4			
						0.2	0.4			
						1.5	0.3			
						1.5	0.3			
						0.8	0.4			
						0	0.3			
						0.2	0.4			
						0.4	0.4			
						1.1	0.4			
						0.2	0.4			
						0.2	0.3			
					Average	0.625	0.358333333			
					Standard Deviation	0.546268332	0.051492865			
362	Tsu Chung Chi	17.2	145.0	32		3.5	0.4	X		
						1.9	0.5			
						1.8	0.3			
						1.6	0.4			
						1.2	0.5			
						3.8	0.6			
						2.4	0.3			
						2	0.4			
						2	0.4			
						1.9	0.5			
						2.9	0.5			
						1.8	0.3			
					Average	2.233333333	0.425			

				Standard Deviation	0.780830948	0.09653073			
363		12.4	139.7	16.7	3.4	0.5	X		
					1.3	0.5			
					2.4	0.4			
					2.2	0.4			
					3.1	0.5			
					2.7	0.5			
					2.3	0.4			
					5	0.1			
					1.7	0.5			
					2.2	0.6			
					2.6	0.5			
					3	0.5			
				Average	2.658333333	0.45			
				Standard Deviation	0.940462491	0.124316312			
364	Glauber	11.3	142.5	17.6	3.7	0.6	X		
					2.5	0.5			
					2	0.4			
					2.7	0.4			
					2.4	0.4			
					1.9	0.5			
					3.2	0.4			
					1.1	0.5			
					2.2	0.4			
					1.6	0.5			
					1.8	0.4			
					2.4	0.4			
				Average	2.291666667	0.45			
				Standard Deviation	0.702538687	0.067419986			
365		15.1	140.5	16.1	2.1	0.5	X		
					1.9	0.5			
					2.1	0.5			
					1.5	0.4			

						1.7	0.3			
						3	0.4			
						3.3	0.4			
						1.8	0.4			
						2	0.6			
						2.2	0.6			
						1.7	0.4			
						1.5	0.4			
					Average	2.066666667	0.45			
					Standard Deviation	0.558135424	0.090453403			
366		10.3	148.4	11		2.3	0.5	X		
						1	0.4			
						1.5	0.5			
						2.3	0.5			
						2.3	0.5			
						2.4	0.5			
						2	0.6			
						2	0.4			
						1.7	0.5			
						2	0.5			
						1.7	0.5			
						2	0.6			
					Average	1.933333333	0.5			
					Standard Deviation	0.405268336	0.060302269			
367		12.3	146.9	20.3		3.3	0.7	X		
						3.8	0.7			
						1.3	0.7			
						3	0.6			
						1.5	0.6			
						1.6	0.5			
						3.4	0.7			
						0.6	0.7			
						2.7	0.6			
						4.1	0.5			

370		8.8	144.3	16.2		1.9	0.5	X		
						1.1	0.3			
						2.3	0.4			
						1.4	0.4			
						1.6	0.4			
						1.8	0.4			
						1.1	0.4			
						2.1	0.4			
						3.5	0.2			
						2.2	0.4			
						1.6	0.4			
						4.1	0.3			
					Average	2.058333333	0.375			
					Standard Deviation	0.91000333	0.075377836			
371		1.0	143.0	14.2		1.3	0.2	X		
						1.7	0.2			
						3.4	0.3			
						1.7	0.2			
						3	0.2			
						3.7	0.2			
						2.6	0.2			
						1.7	0.2			
						1.1	0.3			
						1.8	0.2			
						2.3	0.2			
						2.2	0.2			
					Average	2.208333333	0.216666667			
					Standard Deviation	0.821814327	0.038924947			
372		1.2	147.6	15.7		1.3	0.5	X		
						2	0.4			
						1.6	0.4			
						1.2	0.5			
						1.8	0.5			
						1.9	0.5			

						1.8	0.5			
						2.1	0.4			
						1.5	0.4			
						1.4	0.4			
						1.2	0.5			
						1.5	0.5			
					Average	1.608333333	0.458333333			
					Standard Deviation	0.308834564	0.051492865			
373	Henderson	4.6	151.8	40		3.3	0.5	X		
						1	0.4			
						1.8	0.5			
						2	0.4			
						1	0.4			
						1.4	0.3			
						1	0.4			
						1.3	0.4			
						1.9	0.4			
						1.8	0.5			
						3.1	0.5			
						2.8	0.5			
					Average	1.866666667	0.433333333			
					Standard Deviation	0.812776759	0.065133895			
374		2.6	154.9	11.6		0.5	0.4	X		
						1.2	0.3			
						1.1	0.3			
						2.9	0.4			
						2.2	0.4			
						0.1	0.3			
						0	0.3			
						0.4	0.2			
						1.1	0.2			
						1.4	0.4			
						2.1	0.6			
						3.5	0.6			

				Average	1.375	0.366666667			
				Standard Deviation	1.106283705	0.130267789			
375	2.2	158.6	20.7		0.5	0.5	X		
					0.9	0.4			
					1.1	0.4			
					0.7	0.5			
					1.1	0.4			
					0.6	0.3			
					2.5	0.4			
					1.2	0.4			
					0.5	0.4			
					0.6	0.5			
					0.5	0.3			
					1.3	0.4			
				Average	0.958333333	0.408333333			
				Standard Deviation	0.568024221	0.066855792			
376	5.4	159.0	12.6		0.5	0.3	X		
					0.8	0.3			
					0.6	0.3			
					0.7	0.3			
					1.7	0.4			
					1.2	0.3			
					1	0.3			
					1.1	0.3			
					1.3	0.3			
					0.1	0.3			
					0.3	0.5			
					0.1	0.3			
				Average	0.783333333	0.325			
				Standard Deviation	0.496960458	0.062158156			
377	4.6	155.3	13.5		1.8	0.5	X		
					1.4	0.6			
					0.2	0.4			

						1.6	0.4			
						0.8	0.4			
						0.9	0.4			
						1.2	0.3			
						1.8	0.4			
						2.6	0.4			
						1.1	0.4			
						0.3	0.4			
						1.9	0.4			
					Average	1.3	0.416666667			
					Standard Deviation	0.695439691	0.071774056			
378		9.9	153.9	17.1		2.3	0.6	X		
						3.2	0.5			
						3.5	0.5			
						1.5	0.7			
						2.8	0.5			
						2.5	0.5			
						2.6	0.5			
						2.6	0.4			
						3.1	0.6			
						3	0.4			
						3.5	0.4			
						2.1	0.6			
					Average	2.725	0.516666667			
					Standard Deviation	0.587947122	0.093743687			
379		9.7	158.7	9.3		1.6	0.5	X		
						1.7	0.4			
						0.9	0.4			
						1.9	0.5			
						1.3	0.4			
						1.9	0.4			
						0.6	0.5			
						0.5	0.4			
						1.4	0.4			

						1.8	0.5			
						1.8	0.4			
						0.7	0.4			
					Average	1.341666667	0.433333333			
					Standard Deviation	0.531649805	0.049236596			
380		10.4	156.5	27.2		2.3	0.4	X		
						2.3	0.4			
						2	0.3			
						2.1	0.4			
						1.9	0.3			
						3.4	0.3			
						1.6	0.4			
						2.5	0.4			
						2.7	0.4			
						2	0.4			
						1.6	0.4			
						2.5	0.3			
					Average	2.241666667	0.366666667			
					Standard Deviation	0.501739399	0.049236596			
381		12.4	153.5	11.5		3.3	0.5	X		
						4.2	0.5			
						1.8	0.5			
						4	0.5			
						1.6	0.7			
						4.3	0.6			
						3	0.5			
						3.1	0.5			
						3.5	0.5			
						3.3	0.4			
						3.6	0.6			
						1.8	0.4			
					Average	3.125	0.516666667			
					Standard Deviation	0.933346861	0.083484711			

382		16.9	156.9	19.1		0.4	0.5	X		
(oval shaped crater)						2.1	0.4			
						2.1	0.4			
						0.9	0.4			
						2.7	0.3			
						2.6	0.4			
						1.3	0.3			
						2.6	0.5			
						2.5	0.5			
						1.6	0.4			
						1.6	0.5			
						2	0.4			
				Average		1.866666667	0.416666667			
				Standard Deviation		0.729050857	0.071774056			
383		19.7	158.6	15.1		1.4	0.4	X		
						3.3	0.5			
						2.8	0.5			
						1.7	0.4			
						0.2	0.3			
						1.8	0.5			
						1.5	0.3			
						2.2	0.3			
						0.9	0.5			
						2.3	0.5			
						2.1	0.4			
				Average		1	0.4			
				Standard Deviation		1.766666667	0.416666667			
				Standard Deviation		0.853158126	0.083484711			
384		17.0	151.9	14		1.8	0.4	X		
						1.7	0.4			
						3	0.5			
						3.3	0.5			
						3	0.5			

						3.8	0.3			
						1.6	0.4			
						3.2	0.4			
						2.4	0.5			
						1.9	0.4			
						1.3	0.4			
						1.9	0.3			
					Average	2.408333333	0.416666667			
					Standard Deviation	0.816264589	0.071774056			
385		13.2	159.6	32.2		2.1	0.4	X		
						2.2	0.4			
						1.9	0.2			
						1.5	0.4			
						1.5	0.4			
						2.9	0.4			
						2.2	0.4			
						1.4	0.3			
						2.4	0.3			
						1.7	0.3			
						2.6	0.4			
						1.8	0.4			
					Average	2.016666667	0.358333333			
					Standard Deviation	0.468718433	0.066855792			
386		24.1	155.9	14.7		2.5	0.5	X		
						2.3	0.4			
						3.1	0.4			
						1.9	0.3			
						3.6	0.4			
						4.9	0.5			
						4.4	0.5			
						3.6	0.4			
						2.8	0.4			
						2	0.4			
						2.7	0.4			

					Average	4.6	0.5			
					Standard Deviation	3.2	0.425			
						1.02069495	0.062158156			
387		25.4	158.5	25.1		3.3	0.4	X		
						3.1	0.4			
						3.6	0.4			
						2.1	0.5			
						3.3	0.6			
						3.3	0.6			
						3.6	0.5			
						1.9	0.4			
						2.2	0.3			
						3.2	0.4			
						2	0.3			
						3.4	0.4			
					Average	2.916666667	0.433333333			
					Standard Deviation	0.658970731	0.098473193			
388		29.1	157.6	30.6		1.3	0.4	X		
						0.1	0.3			
						0.5	0.4			
						0.7	0.4			
						2.1	0.5			
						1.9	0.5			
						3.1	0.5			
						0.1	0.3			
						1.3	0.4			
						0.3	0.3			
						1.2	0.4			
						0.9	0.4			
					Average	1.125	0.4			
					Standard Deviation	0.900631092	0.073854895			
389		29.2	153.6	21.3		4.3	0.6	X		
						4.2	0.8			

					2.7	0.6		
					4.5	0.7		
					3	0.7		
					4.4	0.7		
					2.3	0.8		
					4	0.6		
					8.3	0.9		
					4.7	0.8		
					4.2	0.6		
					4.1	0.8		
				Average	4.225	0.71666667		
				Standard Deviation	1.493698887	0.10298573		
390	26.0	153.1	12.2		4.6	0.6	X	
					4.6	0.7		
					4.9	0.7		
					5	0.6		
					5.3	1		
					4.7	0.6		
					5.3	0.6		
					5.2	0.7		
					4.5	0.7		
					3.8	0.6		
					4.6	0.6		
					4.4	0.6		
				Average	4.74166667	0.66666667		
				Standard Deviation	0.431610795	0.115470054		
391	21.5	152.8	13.9		4.1	0.5	X	
					2.9	0.6		
					4.9	0.6		
					4	0.8		
					3.6	0.6		
					3.5	0.5		
					4.7	0.5		
					5.1	0.6		

						3.8	0.4			
						2.8	0.5			
						3.7	0.7			
						4.7	0.6			
					Average	3.983333333	0.575			
					Standard Deviation	0.75055535	0.105528971			
392		22.8	157.7	18.7		3.8	0.5	X		
						3	0.6			
						3.6	0.6			
						2.3	0.8			
						1.4	0.6			
						1.6	0.5			
						2.8	0.5			
						2.1	0.6			
						4.2	0.4			
						4	0.5			
						2.3	0.7			
						3.6	0.6			
					Average	2.891666667	0.575			
					Standard Deviation	0.953899493	0.105528971			
393		31.1	158.7	19.1		4.2	0.9	X		
						4.9	0.9			
						5.8	0.7			
						4.2	0.3			
						4.9	5.4			
						3.4	0.7			
						3.9	0.7			
						7.5	1.2			
						4.6	0.9			
						4.2	0.6			
						3.9	0.7			
						5.9	0.8			
					Average	4.783333333	1.15			
					Standard Deviation	1.136848381	1.355460338			

394		33.8	158.1	22.7		4.1	0.5	X		
						4.2	0.7			
						4.8	0.8			
						4.4	0.6			
						4.8	0.7			
						4.5	0.6			
						3.4	0.4			
						3.6	0.5			
						3.1	0.6			
						4.1	1			
						5.6	0.7			
						3.8	0.7			
					Average	4.2	0.65			
					Standard Deviation	0.687551651	0.15666989			
395		33.0	151.8	15.5		2.6	0.6	X		
						4.2	0.7			
						4.6	0.6			
						2	0.5			
						2.6	0.4			
						2.5	0.5			
						4.6	0.6			
						3	0.6			
						2.5	0.6			
						2.5	0.5			
						3.6	0.4			
						3	0.4			
					Average	3.141666667	0.533333333			
					Standard Deviation	0.891840113	0.098473193			
396		36.5	157.1	15.6		3.9	0.6	X		
						8.1	1.2			
						5.3	0.6			
						4.5	0.7			
						3.8	0.6			

						1.9	0.4			
						3.9	0.8			
						5.5	0.6			
						3.2	0.6			
						5.9	1			
						4	0.7			
						5.4	0.7			
					Average	4.61666667	0.708333333			
					Standard Deviation	1.570080098	0.210878394			
397		40.2	156.5	14.6		2.8	0.4	X		
						4.8	0.7			
						4.6	0.8			
						4	0.5			
						3.3	0.4			
						3.8	0.7			
						3.6	0.6			
						3.2	0.4			
						3.9	0.6			
						2.7	0.5			
						3.7	0.6			
						2.8	0.4			
					Average	3.6	0.55			
					Standard Deviation	0.679572058	0.138169856			
398		34.4	154.0	19.2		3.5	0.8	X		
						1.8	0.5			
						3.3	0.7			
						0.7	0.6			
						3.4	0.6			
						3.1	0.5			
						4.2	0.4			
						4.2	0.5			
						2.7	0.6			
						3.2	0.5			
						4.1	0.6			

						3.8	0.5			
					Average	3.166666667	0.566666667			
					Standard Deviation	1.034261558	0.107308674			
399		45.9	152.7	13.1		3.9	0.6	X		
						4	0.8			
						2	0.3			
						0.6	0.4			
						4.3	0.5			
						2.5	0.5			
						3.4	0.7			
						4	0.6			
						2.8	0.4			
						3.6	0.4			
						5	0.6			
						2.6	0.3			
					Average	3.225	0.508333333			
					Standard Deviation	1.191732886	0.156427929			
400		43.3	152.1	20.6		4.3	0.9	X		
						5.4	1.1			
						5.5	1.6			
						4.5	0.9			
						3.4	0.8			
						3.7	0.8			
						4.6	0.7			
						4.3	0.8			
						7.2	1.2			
						3.7	0.9			
						6.1	1			
						7	0.9			
					Average	4.975	0.966666667			
					Standard Deviation	1.271452283	0.242462118			
401		46.4	158.7	14.8		2.7	0.5	X		
						3	0.3			

						6.9	0.9			
						4.4	0.5			
						3.1	0.5			
						4.3	0.6			
						2.5	0.2			
						2.2	0.4			
						2.7	0.5			
						2.6	0.5			
						3.9	0.6			
						2.4	0.7			
					Average	3.391666667	0.516666667			
					Standard Deviation	1.329017637	0.180067327			
402		49.2	158.5	24		6.9	0.8	X		
						3.9	0.5			
						2.3	0.3			
						2.1	0.5			
						4.5	0.5			
						3.7	0.7			
						4.4	0.4			
						5.7	0.5			
						2.9	0.5			
						4.9	0.5			
						5	0.8			
						5.1	0.7			
					Average	4.283333333	0.558333333			
					Standard Deviation	1.400541021	0.156427929			
403		49.3	153.6	9.2		0.7	0.2			
						1.7	0.4	X		
						3.6	0.5			
						2.3	0.7			
						2.4	0.4			
						0.8	0.3			
						3.9	0.6			
						2.2	0.6			

						3.4	0.4			
						3	0.4			
						5.3	1			
						0.8	0.3			
					Average	2.508333333	0.483333333			
					Standard Deviation	1.410002149	0.216724934			
404		52.0	154.2	22		6.1	1.1	X		
						3.6	0.4			
						4.2	0.8			
						1	0.3			
						1.8	0.4			
						1	0.3			
						0.9	0.5			
						5.5	1			
						4.8	0.8			
						6.1	0.8			
						1	0.3			
						2.1	0.5			
					Average	3.175	0.6			
					Standard Deviation	2.106321654	0.286038777			
405		54.8	150.3	29.8		0.3	0.2	X		
						1.3	0.5			
						4.2	0.5			
						4.1	0.2			
						4.4	0.7			
						1	0.2			
						3.8	0.6			
						6.7	0.9			
						1.5	0.2			
						1.4	0.3			
						2.7	0.3			
						0.6	0.2			
					Average	2.666666667	0.4			
					Standard Deviation	1.964379769	0.23741027			

406		55.3	159.5	16.7		5.2	0.8	X		
						8.6	1.2			
						2.1	0.3			
						0.7	0.2			
						3.9	0.3			
						0.9	0.4			
						7.9	1.2			
						6.4	0.5			
						3.7	0.7			
						6.8	0.6			
						8.6	1.2			
						3.4	0.4			
				Average		4.85	0.65			
				Standard Deviation		2.835970252	0.372948936			
407		53.7	156.0	17.5		1.7	0.4	X		
						0.7	0.3			
						2.4	0.3			
						5.5	0.6			
						6.2	0.4			
						4.9	0.5			
						4.4	0.4			
						7.4	0.8			
						8.4	1.1			
						2	0.4			
						2.7	0.4			
						1.9	0.3			
				Average		4.016666667	0.491666667			
				Standard Deviation		2.482972315	0.23915888			
408		58.0	154.9	10.6		0.6	0.2	X		
						2.1	0.2			
						5.3	0.8			
						2	0.3			
						3	0.4			

						5.2	0.5			
						4.8	0.7			
						0.8	0.5			
						1.1	0.1			
						5.9	1			
						1.2	0.2			
						4.7	0.2			
					Average	3.058333333	0.425			
					Standard Deviation	1.997479472	0.283244193			
409		59.5	149.9	15		1	0.1	X		
						0.3	0.3			
						3.6	0.6			
						1.8	0.3			
						1.6	0.3			
						2.7	0.4			
						4.7	0.6			
						3.1	0.5			
						1	0.3			
						1.7	0.3			
						0.5	0.1			
						0.6	0.3			
					Average	1.883333333	0.341666667			
					Standard Deviation	1.374331794	0.162135372			
410		59.7	156.3	20.8		5.5	0.2	X		
						4	0.3			
						2.4	0.3			
						0.9	0.3			
						1	0.3			
						1.5	0.2			
						6.5	0.6			
						1.1	0.3			
						5	0.6			
						4.8	0.2			
						3.2	0.3			

						3.2	0.4			
					Average	3.258333333	0.333333333			
					Standard Deviation	1.922336804	0.137068883			
411		59.2	159.4	13.1		7	0.7	X		
						1.6	0.3			
						5	0.4			
						4.9	0.5			
						3.2	0.4			
						2.7	0.3			
						4.6	0.5			
						5.6	0.5			
						12.1	3.1			
						4.5	0.4			
						3	0.3			
						3.9	0.3			
					Average	4.841666667	0.641666667			
					Standard Deviation	2.699985971	0.783301095			
412		65.3	153.0	12.8		13.5	3	X		
						9.9	1.7			
						1.5	0.2			
						6	0.6			
						8.3	1.5			
						6	0.9			
						3.5	0.5			
						0.2	0.2			
						0.5	0.1			
						2	0.3			
						9.4	1.7			
						8.2	1.2			
					Average	5.75	0.991666667			
					Standard Deviation	4.251096115	0.867030809			
413		62.8	157.6	10.9		1.5	0.5	X		

						3.9	0.1			
						3.2	0.3			
						3.2	0.4			
						3.3	0.6			
						2.7	0.2			
						3	0.2			
						1.1	0.2			
						2.4	0.3			
						3.9	0.2			
						1.7	0.4			
						1	0.2			
					Average	2.575	0.3			
					Standard Deviation	1.02790608	0.147709789			
414		67.2	156.4	12.1		8.2	1	X		
						2.9	0.3			
						8.7	0.8			
						7.7	0.7			
						6.5	0.7			
						3.4	0.3			
						4.5	0.5			
						0.4	0.2			
						1	0.1			
						5	0.8			
						3.8	0.3			
						3.1	0.5			
					Average	4.6	0.516666667			
					Standard Deviation	2.713267068	0.282306517			
415		67.3	151.9	11.5		1.9	0.2	X		
						2	0.2			
						0.3	0.1			
						1.4	0.2			
						1.7	0.1			
						11.9	2.4			
						12.8	3.2			

						12	3.4			
						6.9	0.3			
						4.7	0.3			
						2.1	0.2			
						1.2	0.1			
					Average	4.908333333	0.891666667			
					Standard Deviation	4.752503328	1.292958787			
416		68.0	169.3	12.1		1	0.1	X		
						4.6	0.5			
						0.6	0.1			
						0.5	0.1			
						2.1	0.2			
						3.7	0.2			
						4.6	0.2			
						7.8	1.1			
						7.9	1.7			
						6	1			
						3.2	0.3			
						5.8	0.5			
					Average	3.983333333	0.5			
					Standard Deviation	2.606925508	0.50811595			
417		66.1	167.4	19.2		5.8	0.5	X		
						7.5	0.9			
						0.1	0.2			
						1	0.1			
						2.6	0.3			
						0.3	0.3			
						1	0.3			
						0	0.1			
						1.3	0.2			
						9	1.9			
						5.2	0.5			
						4.7	0.4			
					Average	3.208333333	0.475			

				Standard Deviation	3.119574077	0.499317716			
418	69.1	163.6	8.1		2.2	0.1	X		
					1.9	0.2			
					7.2	0.2			
					7.3	0.6			
					7.5	0.8			
					9.9	1			
					6	1.1			
					5.7	0.9			
					2.8	0.2			
					2.9	0.3			
					10.7	0.6			
					5.9	0.2			
				Average	5.833333333	0.516666667			
				Standard Deviation	2.916203426	0.361394605			
419	63.5	164.9	15.3		8.2	0.8	X		
					3.1	0.6			
					0.4	0.2			
					4.7	0.5			
					6.6	0.6			
					2.9	0.5			
					1.8	0.1			
					6.7	1.4			
					6.2	0.7			
					2.4	0.3			
					6.4	0.8			
					8.9	0.8			
				Average	4.858333333	0.608333333			
				Standard Deviation	2.702341858	0.34234043			
420	64.1	170.0	18		1.4	0.1	X		
					2.9	0.2			
					4.2	0.4			
					3	0.3			

						7	1.1			
						10.2	1.7			
						10.6	1.7			
						7.1	1.1			
						4.8	0.6			
						2.2	0.5			
						3	0.4			
						0.6	0.1			
					Average	4.75	0.683333333			
					Standard Deviation	3.293381793	0.578137029			
421		61.2	163.3	12		0.8	0.1	X		
						2.5	0.3			
						1.2	0.2			
						1.7	0.1			
						7.5	0.8			
						12.6	2			
						12.7	4			
						3.7	0.3			
						2	0.2			
						0.3	0.1			
						2.6	0.3			
						5.7	0.5			
					Average	4.441666667	0.741666667			
					Standard Deviation	4.346463209	1.154798946			
422		55.4	165.6	40		2.2	0.3	X		
						2.5	0.6			
						4.6	0.6			
						2.7	0.4			
						0.8	0.1			
						4.9	0.4			
						3	0.5			
						5.7	0.5			
						3.4	0.4			
						2.9	0.2			

						3.2	0.3			
						2.9	0.3			
					Average	3.233333333	0.383333333			
					Standard Deviation	1.308943594	0.152752523			
423		58.1	163.7	20.4		7.6	1	X		
						3.9	0.4			
						4.8	0.5			
						4.5	0.5			
						6.2	0.5			
						7.1	0.7			
						6.7	1			
						5.4	0.6			
						3	0.4			
						7.6	1.2			
						4.5	0.4			
						6.9	0.9			
					Average	5.683333333	0.675			
					Standard Deviation	1.542626646	0.280016233			
424		52.9	167.9	21.7		1.8	0.2	X		
						1.7	0.4			
						0.9	0.1			
						0.7	0.3			
						1.7	0.2			
						0.7	0.2			
						2.5	0.3			
						2	0.4			
						3.5	0.4			
						2.2	0.2			
						2	0.2			
						2.3	0.3			
					Average	1.833333333	0.266666667			
					Standard Deviation	0.803778953	0.098473193			
425		51.0	167.2	18		2.1	0.4	X		

						5.5	0.5			
						5.5	0.6			
						2	0.5			
						2.8	0.5			
						0.5	0.3			
						0.1	0.2			
						3.4	0.5			
						3.6	0.5			
						3.7	0.4			
						4.1	0.4			
						4.7	0.5			
					Average	3.16666667	0.44166667			
					Standard Deviation	1.752573865	0.108362467			
426		47.6	163.0	11		4.1	0.8	X		
						5.1	0.9			
						4.3	0.8			
						3.9	0.8			
						2.5	0.5			
						3.4	0.3			
						3.2	0.5			
						4.8	0.6			
						6.5	1			
						6.9	0.8			
						8.6	1.3			
						3.8	0.8			
					Average	4.758333333	0.758333333			
					Standard Deviation	1.762466419	0.260971379			
427		45.6	166.7	15		3.5	0.8	X		
						5	1.2			
						5.9	1.4			
						7	1.2			
						3.1	0.8			
						4.1	1.1			
						5	1			

						5.4	1.3			
						4.8	1.4			
						3.4	0.7			
						2.5	0.6			
						3.3	0.7			
					Average	4.416666667	1.016666667			
					Standard Deviation	1.324478171	0.288675135			
428		48.9	167.6	14		3.6	0.5	X		
						6.3	0.9			
						4.6	0.7			
						2.7	0.6			
						6.4	0.9			
						8	1			
						5.1	0.9			
						7.1	0.9			
						4.9	0.6			
						1.6	0.4			
						5.7	0.8			
						2.8	0.6			
					Average	4.9	0.733333333			
					Standard Deviation	1.936726385	0.192275056			
429		40.7	163.1	15		2.8	0.4	X		
						3.4	0.4			
						3.5	0.5			
						5.3	0.9			
						6.3	1.6			
						3.4	0.9			
						2.5	0.5			
						2	0.4			
						1.8	0.5			
						2	0.6			
						3.3	0.5			
						4.3	1			
					Average	3.383333333	0.683333333			

				Standard Deviation	1.365039682	0.358870281			
430	41.1	169.1	15.5		3.5	0.6	X		
					5.6	1			
					6.2	1.2			
					7.1	1.1			
					6.4	1.4			
					2.9	0.5			
					5.4	1			
					5	0.6			
					3.8	0.8			
					7.3	1.3			
					2.7	0.5			
					4.3	1			
				Average	5.016666667	0.916666667			
				Standard Deviation	1.581043001	0.312855858			
431	42.7	161.7	9.1		1.7	1.1	X		
					2.3	0.6			
					5.3	0.9			
					2.8	0.6			
					3.4	0.6			
					7.9	0.6			
					4.3	2			
					3.5	0.8			
					5.3	0.7			
					3.3	0.6			
					2.8	0.6			
					3.8	0.5			
				Average	3.866666667	0.8			
				Standard Deviation	1.66969422	0.413411527			
432	35.7	166.0	10.4		0.8	0.3	X		
					1.2	0.3			
					3.1	0.4			
					2.8	0.6			

						5.3	0.9			
						5.9	1.2			
						5.9	1.3			
						4.1	1.3			
						2.5	0.5			
						3.1	0.4			
						1.8	0.4			
						1.8	0.4			
					Average	3.191666667	0.666666667			
					Standard Deviation	1.761950538	0.396194014			
433		32.9	168.9	27.5		0.7	0.2	X		
						1.5	0.3			
						1.56	0.3			
						3	0.5			
						1.3	0.4			
						5.4	0.5			
						1.7	0.3			
						3.5	0.5			
						2.1	0.4			
						0.9	0.2			
						0.7	0.2			
						0.5	0.3			
					Average	1.905	0.341666667			
					Standard Deviation	1.432585076	0.116450015			
434		37.8	164.1	14		6.9	1.2	X		
						2.6	0.6			
						2.7	0.3			
						5.8	1.4			
						6.4	1			
						5.2	0.9			
						3.7	0.4			
						2.1	0.5			
						2.9	0.4			
						2.9	0.5			

						2.3	0.3			
						2.6	0.3			
					Average	3.841666667	0.65			
					Standard Deviation	1.736484606	0.380191339			
435		29.8	163.8	35.4		0.8	0.3	X		
						2.3	0.4			
						2.9	0.5			
						2.1	0.4			
						1.2	0.3			
						2.4	0.5			
						1.7	0.4			
						2.1	0.4			
						2.8	0.3			
						2.6	0.2			
						2	0.3			
						2.1	0.4			
					Average	2.083333333	0.366666667			
					Standard Deviation	0.616195561	0.088762536			
436		33.6	161.9	12.6		2.9	0.4	X		
						2.5	0.5			
						5.7	0.7			
						6.1	0.7			
						8.7	0.7			
						7	0.6			
						4.5	0.6			
						3.3	0.5			
						3.6	0.4			
						3.3	0.4			
						4.4	0.6			
						5.8	0.6			
					Average	4.816666667	0.558333333			
					Standard Deviation	1.87414627	0.116450015			
437		26.1	165.5	17.5		0.6	0.3	X		

						1.7	0.4			
						2.1	0.4			
						1.8	0.3			
						2.5	0.3			
						1.5	0.3			
						1.2	0.4			
						1.3	0.3			
						2.2	0.3			
						1.1	0.3			
						1.9	0.6			
						2.8	0.5			
					Average	1.725	0.366666667			
					Standard Deviation	0.626860866	0.098473193			
438		29.8	169.7	20.1		2.6	0.3	X		
						1.1	0.2			
						2.2	0.3			
						3.4	0.4			
						1.7	0.3			
						0.6	0.3			
						1.8	0.3			
						1	0.3			
						1.2	0.3			
						1.9	0.3			
						1.7	0.2			
						1.3	0.2			
					Average	1.708333333	0.283333333			
					Standard Deviation	0.766880734	0.057735027			
439		22.8	167.5	17.2		2.7	0.3	X		
						2.1	0.3			
						2.7	0.4			
						1.8	0.4			
						2.1	0.4			
						2.3	0.3			
						1.2	0.4			

						1.7	0.3			
						1.5	0.3			
						2	0.3			
						3	0.1			
						2.9	0.4			
					Average	2.16666667	0.325			
					Standard Deviation	0.571017168	0.08660254			
440		25.5	162.6	13.5		2.9	0.4	X		
						3.4	0.3			
						2.9	0.3			
						3.9	0.5			
						2.2	0.4			
						2.5	0.3			
						1.5	0.3			
						2.9	0.6			
						4.5	0.5			
						2.5	0.5			
						3.9	0.4			
						3.8	0.5			
					Average	3.075	0.41666667			
					Standard Deviation	0.854001277	0.10298573			
441		21.2	161.3	16.6		3.1	0.5	X		
						3.4	0.5			
						3	0.5			
						4.1	0.5			
						2.7	0.5			
						3.7	0.6			
						4.2	0.6			
						3.6	0.6			
						3.1	0.5			
						3.3	0.6			
						2.5	0.6			
						3.6	0.5			
					Average	3.35833333	0.54166667			

				Standard Deviation	0.516030889	0.051492865			
442		26.9	146.2	17.1	14.2	3	X		
					14.5	3.5			
					13.9	4			
					13	2.9			
					13.7	3.1			
					14.7	3.2			
					14.7	3.5			
					14.3	3			
					12.7	3			
					14.2	3.4			
					14.8	3.9			
					14.4	3.6			
				Average	14.09166667	3.341666667			
				Standard Deviation	0.666685606	0.367938565			
443		27.3	160.3	23.8	1.5	0.4	X		
					2.8	0.4			
					4.1	0.3			
					3.1	0.5			
					4.2	0.4			
					3.7	0.5			
					5.4	0.6			
					3	0.7			
					4.4	0.4			
					1.4	0.4			
					1	0.3			
					2.5	0.4			
				Average	3.091666667	0.441666667			
				Standard Deviation	1.343982098	0.116450015			
444		18.4	167.1	18	1.6	0.2	X		
					1.5	0.2			
					1.3	0.3			
					0.4	0.3			

						1.6	0.3			
						0.6	0.4			
						0.9	0.3			
						1.6	0.2			
						1.5	0.3			
						1.1	0.3			
						0.4	0.3			
						0.5	0.3			
					Average	1.083333333	0.283333333			
					Standard Deviation	0.498786406	0.057735027			
445		20.1	163.2	15.4		1.9	0.3	X		
						1.4	0.3			
						3.3	0.4			
						4.1	0.4			
						4.4	0.6			
						1.4	0.4			
						1.1	0.3			
						0.4	0.4			
						2	0.4			
						3	0.4			
						3.2	0.5			
						3.9	0.4			
					Average	2.508333333	0.4			
					Standard Deviation	1.311112181	0.085280287			
446		15.3	161.5	9.8		1.5	0.4	X		
						0.8	0.4			
						1	0.4			
						1.6	0.4			
						1.9	0.3			
						2.2	0.4			
						1.2	0.4			
						1.9	0.3			
						1.6	0.4			
						1	0.5			

						0.5	0.3			
						1.5	0.4			
					Average	1.391666667	0.383333333			
					Standard Deviation	0.501739399	0.057735027			
447		15.7	167.5	12.9		0.2	0.2	X		
						1.8	0.3			
						1.5	0.2			
						1.1	0.2			
						1.8	0.2			
						0.5	0.2			
						1	0.2			
						1	0.4			
						0.1	0.3			
						0.5	0.3			
						0.6	0.3			
						1.3	0.3			
					Average	0.95	0.258333333			
					Standard Deviation	0.580751864	0.066855792			
448		11.7	164.6	14.8		0.3	0.3	X		
						1.5	0.3			
						0.8	0.2			
						0.2	0.2			
						1.9	0.4			
						1.5	0.3			
						1.2	0.3			
						1.6	0.3			
						0.4	0.3			
						0.4	0.2			
						0.3	0.3			
						0.7	0.3			
					Average	0.9	0.283333333			
					Standard Deviation	0.607528525	0.057735027			
449		10.4	167.1	30.2		1.4	0.3	X		

						0.5	0.2			
						0.3	0.3			
						0.9	0.3			
						1.2	0.3			
						0.7	0.3			
						1.3	0.3			
						1.5	0.3			
						0.7	0.3			
						0.8	0.3			
						0.5	0.3			
						1	0.2			
					Average	0.9	0.283333333			
					Standard Deviation	0.38612292	0.038924947			
450		5.0	166.0	14.7		2.4	0.3	X		
						2.1	0.3			
						1.3	0.3			
						3.4	0.4			
						4.3	0.5			
						2.9	0.3			
						0.5	0.2			
						2.7	0.4			
						1.7	0.3			
						1.6	0.3			
						2.9	0.3			
						2.1	0.3			
					Average	2.325	0.325			
					Standard Deviation	1.011861471	0.075377836			
451		1.3	160.8	35		1	0.4	X		
						0.2	0.4			
						0.9	0.4			
						0.5	0.4			
						2.2	0.4			
						0.4	0.4			
						1.5	0.4			

						1	0.4			
						2.2	0.4			
						1.1	0.4			
						1.1	0.5			
						1.2	0.4			
					Average	1.108333333	0.408333333			
					Standard Deviation	0.625893301	0.028867513			
452		9.5	168.1	12.5		0.6	0.3	X		
						1.3	0.3			
						0.2	0.2			
						1.6	0.2			
						0.8	0.2			
						0.3	0.2			
						0.8	0.3			
						0.9	0.2			
						1.1	0.3			
						0.7	0.2			
						0.9	0.2			
						1.3	0.2			
					Average	0.875	0.233333333			
					Standard Deviation	0.409267639	0.049236596			
453		3.5	170.8	34		0.6	0.4	X		
						1.2	0.3			
						2.1	0.3			
						1.3	0.3			
						1	0.3			
						1.7	0.3			
						0.6	0.3			
						1	0.3			
						1.8	0.4			
						3.6	0.3			
						0.5	0.4			
						1.6	0.4			
					Average	1.416666667	0.333333333			

				Standard Deviation	0.856879469	0.049236596			
454		1.7	173.1	18.3	0.2	0.4	X		
					3	0.5			
					1.4	0.4			
					0.3	0.4			
					2.1	0.4			
					2.4	0.4			
					1.5	0.4			
					1.8	0.5			
					2.4	0.5			
					3.4	0.4			
					2.5	0.4			
					1.1	0.5			
				Average	1.841666667	0.433333333			
				Standard Deviation	0.992204463	0.049236596			
455		4.6	175.2	11.5	1.6	0.5	X		
					1.5	0.4			
					1	0.5			
					1.7	0.4			
					1	0.4			
					1.3	0.3			
					1.3	0.4			
					1.3	0.3			
					1.2	0.4			
					0.7	0.4			
					13	0.4			
					1.4	0.4			
				Average	2.25	0.4			
				Standard Deviation	3.39665611	0.060302269			
456		2.0	178.3	16	2.2	0.4	X		
					2.3	0.4			
					1.6	0.4			
					1.2	0.3			

						1.7	0.4			
						2.7	0.4			
						1.6	0.5			
						2.1	0.4			
						2.3	0.4			
						1.9	0.4			
						2.3	0.3			
						1.2	0.3			
					Average	1.925	0.383333333			
					Standard Deviation	0.471216993	0.057735027			
457		3.7	178.7	26.6		2.4	0.4	X		
						2.3	0.4			
						2	0.3			
						2.1	0.3			
						2.2	0.3			
						1.9	0.3			
						1.9	0.4			
						2.6	0.3			
						2.3	0.4			
						1.5	0.5			
						2.8	0.3			
						2.1	0.4			
					Average	2.175	0.358333333			
					Standard Deviation	0.34410622	0.066855792			
458		9.5	178.4	17.6		2.8	0.4	X		
						1.6	0.2			
						1.2	0.3			
						1	0.3			
						2.2	0.3			
						1	0.4			
						1.5	0.3			
						1.1	0.3			
						1.2	0.3			
						1.3	0.4			

461		9.8	174.0	13.5		0	0.3	X		
						0.5	0.4			
						0.9	0.4			
						0.2	0.3			
						0.6	0.3			
						0.4	0.4			
						0.5	0.3			
						1	0.3			
						0.9	0.3			
						0.2	0.3			
						0.7	4			
						0.7	0.3			
					Average	0.55	0.633333333			
					Standard Deviation	0.31188576	1.061160028			
462		14.2	171.0	15		0.1	0.3	X		
						0.8	0.3			
						0.4	0.3			
						1.3	0.3			
						0.2	0.3			
						0.5	0.3			
						0.8	0.3			
						0.6	0.3			
						0.5	0.3			
						0.3	0.2			
						0.7	0.3			
						0	0.3			
					Average	0.516666667	0.291666667			
					Standard Deviation	0.358870281	0.028867513			
463		13.4	175.0	17.3		0.9	0.4	X		
						0.2	0.3			
						0.2	0.3			
						0.7	0.3			
						0	0.3			
						0.2	0.3			

						0.8	0.3			
						0	0.3			
						0.9	0.3			
						0.3	0.3			
						0.4	0.3			
						0.1	0.3			
					Average	0.391666667	0.308333333			
					Standard Deviation	0.34234043	0.028867513			
464		17.8	177.7	26.5		0.7	0.2	X		
						1.9	0.2			
						1	0.2			
						0.9	0.2			
						0.4	0.3			
						2.3	0.5			
						0.7	0.2			
						0.8	0.2			
						0.2	0.2			
						0.9	0.2			
						0.3	0.2			
						0.1	0.2			
					Average	0.85	0.233333333			
					Standard Deviation	0.658510716	0.088762536			
465	Virtanen	15.7	176.6	38		0.2	0.2	X		
						0	0.2			
						0	0.1			
						0.2	0.2			
						0.1	0.2			
						0.1	0.2			
						0.2	0.2			
						0.7	0.2			
						0.5	0.2			
						3.4	0.6			
						0.7	0.2			
						0.2	0.2			

				Average	0.525	0.225			
				Standard Deviation	0.937234811	0.121543109			
466	17.0	173.3	23.8		2.4	0.3	X		
					2	0.3			
					0.9	0.2			
					1.5	0.2			
					0.5	0.2			
					0.1	0.2			
					0	0.2			
					0.5	0.1			
					2.9	0.4			
					3.1	0.4			
					2	0.4			
					1.8	0.4			
				Average	1.475	0.275			
				Standard Deviation	1.065257118	0.105528971			
467	19.6	170.6	12.4		0.3	0.4	X		
					0.8	0.3			
					0.9	0.3			
					0.9	0.3			
					1	0.3			
					0.7	0.3			
					0.4	0.4			
					0.9	0.3			
					1.4	0.3			
					0.6	0.2			
					0.1	0.4			
					0.3	0.3			
				Average	0.691666667	0.316666667			
				Standard Deviation	0.367938565	0.057735027			
468	23.2	178.4	11.3		0.2	0.3	X		
					0.7	0.2			
					1.8	0.4			

						1.8	0.3			
						1	0.3			
						0	0.2			
						1.3	0.3			
						1.9	0.3			
						0.2	0.3			
						0.6	0.2			
						0.7	0.3			
						1.3	0.3			
					Average	0.958333333	0.283333333			
					Standard Deviation	0.665320611	0.057735027			
469		25.2	173.8	25.5		1.2	0.3	X		
						0.9	0.3			
						0.2	0.5			
						2.3	0.2			
						0.2	0.3			
						1.9	0.4			
						2.3	0.3			
						0.8	0.3			
						2.6	0.4			
						0.9	0.2			
						0.7	0.3			
						0.1	0.3			
					Average	1.175	0.316666667			
					Standard Deviation	0.887411967	0.083484711			
470		28.5	178.8	13.5		1.6	0.4	X		
						0.4	0.2			
						2.6	0.4			
						0.6	0.5			
						2.1	0.4			
						1.8	0.5			
						2.9	0.5			
						2.2	0.4			
						2.8	0.3			

473		22.6	171.1	14.5		2.7	0.4	X		
						2.8	0.3			
						2.3	0.5			
						2.5	0.3			
						2.6	0.3			
						2.1	0.5			
						2.1	0.4			
						3	0.5			
						0.1	0.4			
						2.2	0.5			
						2.6	0.4			
						2.5	0.5			
					Average	2.291666667	0.416666667			
					Standard Deviation	0.744016536	0.083484711			
474		28.7	172.2	13.9		1.8	0.3	X		
						3.3	0.5			
						2.6	0.3			
						2	0.3			
						2.4	0.3			
						0.8	0.3			
						1.1	0.3			
						2.5	0.3			
						1.4	0.4			
						1.7	0.4			
						1.6	0.4			
						2.3	0.4			
					Average	1.958333333	0.35			
					Standard Deviation	0.702538687	0.067419986			
475		33.1	175.2	37.7		1.1	0.7	X		
						1	0.3			
						1.6	0.3			
						2.7	0.4			
						2.7	0.3			
						1	0.2			

						2.2	0.4			
						3.2	0.3			
						1.7	0.3			
						1.3	0.2			
						1	0.3			
						1.5	0.3			
					Average	1.75	0.333333333			
					Standard Deviation	0.7692972	0.130267789			
476		35.6	177.4	12		0.6	0.3	X		
						1.6	0.3			
						2	0.4			
						1.7	0.4			
						2.9	0.3			
						2.7	0.3			
						1.5	0.3			
						1.1	0.3			
						0.8	0.2			
						0.9	0.4			
						0.8	0.5			
						2.3	0.3			
					Average	1.575	0.333333333			
					Standard Deviation	0.77356906	0.077849894			
477		35.9	171.6	20.3		0.2	0.2	X		
						0.5	0.2			
						1.3	0.4			
						4	0.6			
						4.2	0.5			
						4.8	0.6			
						2.4	0.5			
						0.2	0.3			
						0.8	0.2			
						0.1	0.2			
						0.9	0.2			
						0.5	0.2			

				Average	1.658333333	0.341666667			
				Standard Deviation	1.736484606	0.167648622			
478	37.7	170.7	14.1		3	0.3	X		
					0.7	0.3			
					2.2	0.5			
					3	0.5			
					2.7	0.4			
					5.2	0.8			
					4.2	0.6			
					3.3	0.4			
					1.8	0.3			
					1.3	0.3			
					1.8	0.4			
					1.1	0.5			
				Average	2.525	0.441666667			
				Standard Deviation	1.316417314	0.150504203			
479	38.7	176.9	20.1		0.7	0.2	X		
					0.5	0.2			
					1.5	0.2			
					2.8	0.4			
					5.6	0.4			
					4	0.4			
					2.4	0.2			
					0.9	0.2			
					0.5	0.2			
					3.8	0.4			
					1.6	0.3			
					0.5	0.2			
				Average	2.066666667	0.275			
				Standard Deviation	1.67892462	0.09653073			
480	48.9	175.9	20.6		0.5	0.3	X		
					2	0.4			
					3.8	0.5			

						1.9	0.5			
						3.2	0.5			
						0.8	0.3			
						2.1	0.7			
						2.5	0.5			
						3.1	0.6			
						0.8	0.3			
						1.1	0.3			
						1.2	0.3			
					Average	1.91666667	0.43333333			
					Standard Deviation	1.072663069	0.137068883			
481		44.7	176.5	10.2		1	0.3	X		
						1.2	0.4			
						1	0.2			
						2.9	0.4			
						0.9	0.4			
						2.5	0.5			
						1	0.2			
						0	0.2			
						1.4	0.5			
						1	0.3			
						1.1	0.2			
						0.4	0.3			
					Average	1.2	0.325			
					Standard Deviation	0.795441558	0.113818037			
482		43.8	170.6	10.7		6.3	1.2	X		
						4.2	0.9			
						2.4	0.4			
						1.8	0.6			
						2.2	0.4			
						3.8	0.6			
						3.3	0.7			
						3.5	0.5			
						2.4	0.4			

485		40.9	174.5	21.9		3.1	0.5	X		
						3.1	0.3			
						3.1	0.3			
						2.5	0.2			
						1.9	0.4			
						1	0.3			
						0.1	0.3			
						1.1	0.3			
						1.4	0.2			
						1.8	0.3			
						3.3	0.4			
						0.9	0.3			
					Average	1.941666667	0.316666667			
					Standard Deviation	1.06894879	0.083484711			
486		55.2	177.0	15.6		8.2	0.4	X		
						6.5	0.4			
						7.6	0.6			
						10.4	0.8			
						9.1	0.7			
						5.6	0.4			
						6.2	1			
						5.8	0.5			
						4.9	0.2			
						4.6	0.3			
						5.4	0.6			
						8	0.3			
					Average	6.858333333	0.516666667			
					Standard Deviation	1.797704766	0.232900031			
487		52.6	178.6	19.9		2.4	0.3	X		
						1.2	0.2			
						2.6	0.4			
						3	0.3			
						4.5	0.4			
						5.5	0.3			

						2.4	0.4			
						3.2	0.4			
						3.6	0.3			
						1	0.2			
						1.7	0.1			
						6.8	0.4			
					Average	3.158333333	0.308333333			
					Standard Deviation	1.728087926	0.099620492			
488		50.7	178.6	14		0.3	0.2	X		
						0.1	0.2			
						4	0.3			
						1.5	0.3			
						4.3	0.6			
						5.1	0.5			
						4.6	0.6			
						0.4	0.2			
						5.2	0.6			
						1.8	0.5			
						0.1	0.2			
						1.6	0.3			
					Average	2.416666667	0.375			
					Standard Deviation	2.065664469	0.171225529			
489		53.9	172.6	13.5		3.9	0.4	X		
						6.9	0.8			
						3.3	0.2			
						4.8	1.1			
						2.3	0.2			
						2.2	0.3			
						4.8	0.5			
						4.4	0.3			
						3.2	0.4			
						3.5	0.3			
						7.6	1			
						4.2	0.3			

				Average	4.258333333	0.483333333			
				Standard Deviation	1.639544467	0.309936455			
490	59.5	171.0	19.1		0.5	0.2	X		
					1	0.2			
					3.7	0.8			
					2.5	0.3			
					4.3	0.6			
					7.1	0.8			
					2.6	0.2			
					5.5	1.2			
					5.8	1			
					2.2	0.2			
					2.5	0.4			
					3.8	0.6			
				Average	3.458333333	0.541666667			
				Standard Deviation	1.971367008	0.347610894			
491	54.8	172.7	10		4.3	0.2	X		
					3.2	0.2			
					7.3	0.6			
					7.6	0.8			
					8.6	1.3			
					6.2	1.1			
					3	0.2			
					2.6	0.2			
					2.3	0.3			
					1.8	0.2			
					3.1	0.4			
					5.2	0.6			
				Average	4.6	0.508333333			
				Standard Deviation	2.319874605	0.382475985			
492	59.9	179.1	10.2		4.1	0.2	X		
					0.6	0.2			
					3.3	0.4			

						3.2	0.3			
						8.2	0.8			
						15	4.1			
						8.4	1.1			
						8.4	3.4			
						5.1	0.6			
						2.6	0.2			
						1.1	0.2			
						2.2	0.2			
					Average	5.183333333	0.975			
					Standard Deviation	4.134958136	1.33561358			
493		61.2	176.4	10.8		2.3	0.3	X		
						2.8	0.5			
						2.1	0.1			
						3.8	0.2			
						3.8	0.4			
						3.9	0.4			
						6.1	0.8			
						4.1	0.5			
						1.8	0.2			
						2.3	0.2			
						2.3	0.3			
						1.3	0.1			
					Average	3.05	0.333333333			
					Standard Deviation	1.332461836	0.201509455			
494		57.9	175.3	33.6		3.4	0.1	X		
						5.7	0.6			
						1.6	0.2			
						3.7	0.3			
						6.3	0.7			
						2.4	0.1			
						0.9	0.1			
						1.1	0.1			
						0.1	0.2			

497		68.6	177.6	18		1	0.1	X		
						0.5	0.2			
						0.1	0.1			
						9.4	1.1			
						9.2	1.3			
						10.3	2.9			
						10	1.7			
						2.4	0.5			
						3.6	0.3			
						0	0.1			
						0.3	0.3			
						0.7	0.2			
					Average	3.958333333	0.733333333			
					Standard Deviation	4.386230175	0.867947771			
498		63.6	93.0	46.7		0.8	0.1	X		
						2.4	0.2			
						0.5	0.1			
						0.2	0.4			
						0.1	0.3			
						0.5	0.4			
						1.3	0.2			
						2.3	0.3			
						5.8	0.6			
						3.1	0.4			
						1.1	0.2			
						1	0.1			
					Average	1.591666667	0.275			
					Standard Deviation	1.623384978	0.154478595			
499		57.7	92.7	11.5		2	0.1	X		
						1.7	0.3			
						1.1	0.4			
						0.9	0.2			
						0.5	0.3			
						1.7	0.2			

						0.1	0.2			
						3	0.3			
						2	0.1			
						1.2	0.3			
						0.2	0.2			
						1.5	0.4			
					Average	1.325	0.25			
					Standard Deviation	0.837881528	0.1			
500		55.4	159.5	16.1		1.7	0.4	X		
						7.3	0.9			
						5.4	0.5			
						6.8	0.9			
						4.3	0.5			
						5.1	0.7			
						2.5	0.3			
						2.3	0.3			
						2	0.2			
						1.5	0.2			
						2.8	0.6			
						6.2	0.8			
					Average	3.991666667	0.525			
					Standard Deviation	2.109484355	0.256284643			
501		50.0	135.5	9.1		1.1	0.3	X		
						4.1	0.6			
						4	0.4			
						2.5	0.3			
						2.5	0.3			
						2.5	0.3			
						0.4	0.3			
						1.6	0.2			
						2.4	0.3			
						2.7	0.5			
						2.6	0.3			
						5.1	0.6			

				Average	2.625	0.366666667			
				Standard Deviation	1.301135867	0.130267789			
502	0.3	-178.5	12.7		1.8	0.4	X		
		181.5			2.4	0.5			
					3.1	0.5			
					2.5	0.3			
					1.9	0.5			
					2.5	0.4			
					2.2	0.4			
					2.4	3.1			
					1	0.3			
					1.9	0.4			
					1.3	0.4			
					0.5	0.3			
				Average	1.958333333	0.625			
				Standard Deviation	0.729206709	0.782914137			
503	3.6	-172.8	14.1		2.8	0.4	X		
		187.2			3.1	0.5			
					3.1	0.5			
					2.7	0.3			
					2.7	0.4			
					1.6	0.5			
					1.3	0.4			
					1.5	0.4			
					2.3	0.4			
					1.8	0.4			
					3	0.5			
					2.5	0.5			
				Average	2.366666667	0.433333333			
				Standard Deviation	0.654124444	0.065133895			
504	1.1	-172.8	10		1.8	0.5	X		
		187.2			1	0.5			
					2.8	0.6			

						0.5	0.4			
						2.5	0.5			
						2	0.4			
						2.5	0.4			
						2.5	0.4			
						3.1	0.6			
						2.2	0.4			
						2.6	0.5			
						3.2	0.4			
					Average	2.225	0.466666667			
					Standard Deviation	0.804673847	0.077849894			
505		2.4	-170.8	17		3.8	0.5	X		
			189.2			2.9	0.4			
						2.3	0.6			
						2.7	0.5			
						3.3	0.4			
						2.7	0.6			
						3.3	0.4			
						3.6	0.4			
						2.9	0.4			
						3.5	0.5			
						2.5	0.5			
						2.9	0.4			
					Average	3.033333333	0.466666667			
					Standard Deviation	0.463844279	0.077849894			
506		8.7	-179.0	23.6		1.5	0.3	X		
			181.0			0.8	0.3			
						0.3	0.2			
						0.8	0.4			
						1.1	0.3			
						0.8	0.3			
						1.6	0.3			
						1.4	0.4			
						0.8	0.3			

509		8.1	-174.1	17.8		2.2	0.5	X		
			183.9			2.7	0.5			
						3	0.5			
						3.2	0.6			
						2.6	0.5			
						3.4	0.5			
						3.2	0.5			
						2.1	0.4			
						2	0.4			
						3.7	0.5			
						2.8	0.5			
						3.2	0.5			
					Average	2.841666667	0.491666667			
					Standard Deviation	0.540131858	0.051492865			
510		10.5	-171.4	27.7		3	0.4	X		
			188.6			2.6	0.4			
						1.7	0.4			
						2	0.5			
						1.4	0.5			
						2.9	0.4			
						2.3	0.4			
						1.8	0.5			
						1.6	0.4			
						2.3	0.4			
						2.2	0.4			
						2.5	0.4			
					Average	2.191666667	0.425			
					Standard Deviation	0.508935312	0.045226702			
511	Hayford	12.7	-176.7	27.7		2.2	0.3	X		
			183.3			1.6	0.4			
						1.9	0.4			
						1.7	0.4			
						1.3	0.3			
						0.3	0.3			

						1.6	0.3			
						2.5	0.4			
						1.9	0.4			
						1.4	0.3			
						1.5	0.3			
						1.8	0.4			
					Average	1.641666667	0.35			
					Standard Deviation	0.540131858	0.052223297			
512		15.6	-171.5	16.6		1.7	0.4	X		
			188.5			2	0.5			
						1.7	0.4			
						2	0.5			
						2.8	0.5			
						1.8	0.4			
						2	0.4			
						1.5	0.3			
						1.5	0.4			
						1.8	0.3			
						2.5	0.4			
						2	0.4			
					Average	1.941666667	0.408333333			
					Standard Deviation	0.382475985	0.066855792			
513		15.6	-175.9	12.3		2	0.3	X		
			184.1			1.8	0.4			
						0.9	0.4			
						2	0.6			
						0.2	0.5			
						1.4	0.4			
						2.1	0.4			
						1.1	0.4			
						1.7	0.3			
						2.2	0.3			
						1.2	0.2			
						3	0.5			

				Average	1.633333333	0.391666667			
				Standard Deviation	0.727802837	0.108362467			
514	18.1	-175.1	10.5		2.3	0.6	X		
		184.9			2.8	0.7			
					2.9	0.7			
					2	0.6			
					0.5	0.4			
					1.2	0.4			
					2.8	0.5			
					0.7	0.5			
					1.5	0.4			
					2.2	0.6			
					2.7	0.8			
					2.7	0.5			
				Average	2.025	0.558333333			
				Standard Deviation	0.854001277	0.131137217			
515	18.4	-170.0	10.3		3	0.5	X		
		190.0			2.9	0.6			
					3.1	0.6			
					3.3	0.5			
					2	0.5			
					3.2	0.5			
					1.8	0.4			
					2.6	0.6			
					2.3	0.4			
					3.2	0.4			
					2.2	0.4			
					3.2	0.5			
				Average	2.733333333	0.491666667			
				Standard Deviation	0.531436019	0.079296146			
516	24.9	-178.8	26.1		0.8	0.1	X		
		181.2			0.5	0.2			
					0.4	0.3			

						0.4	0.2			
						0.5	0.3			
						0.7	0.2			
						1.6	0.1			
						0.8	0.4			
						0.4	0.3			
						0.1	0.3			
						0.9	0.3			
						0.8	0.4			
					Average	0.658333333	0.258333333			
					Standard Deviation	0.377692355	0.099620492			
517		29.1	-170.8	25		1.3	0.4			
			189.2			1.2	0.4			
						2.3	0.3			
						2.4	0.4			
						1.3	0.3			
						1.8	0.4			
						1.8	0.4			
						2	0.5			
						1.5	0.4			
						1.9	0.4			
						1.2	0.4			
						1.2	0.3			
					Average	1.658333333	0.383333333			
					Standard Deviation	0.435802986	0.057735027			
518		23.5	-174.3	15.5		1	0.3	X		
			185.7			1.3	0.3			
						0.9	0.3			
						1.2	0.2			
						1.2	0.3			
						1.4	0.4			
						1.1	0.3			
						1.3	0.4			
						1.8	0.4			

						0.7	0.3			
						0.7	0.4			
						0.3	0.4			
					Average	1.075	0.33333333			
					Standard Deviation	0.391094037	0.065133895			
519		27.0	-174.5	11.8		2	0.5	X		
			185.5			2	0.4			
						2	0.3			
						1.9	0.4			
						2	0.4			
						1.3	0.4			
						1.6	0.5			
						1.5	0.4			
						0.8	0.4			
						1.7	0.3			
						1.5	0.3			
						0.7	0.4			
						1.2	0.3			
					Average	1.553846154	0.384615385			
					Standard Deviation	0.450213625	0.068873723			
520		21.0	-170.7	16		2.4	0.4	X		
			189.3			2.1	0.5			
						2.3	0.6			
						2.9	0.7			
						4.2	0.6			
						1.4	0.7			
						1.7	0.5			
						2.8	0.6			
						1.3	0.3			
						2.7	0.4			
						1.7	0.4			
						2	0.4			
					Average	2.291666667	0.508333333			
					Standard Deviation	0.800520664	0.131137217			

521		29.0	-175.4	10		2.2	0.4	X		
			184.6			1.8	0.4			
						3.2	0.5			
						1.6	0.5			
						1.7	0.4			
						1.5	0.4			
						0.9	0.4			
						2	0.3			
						1.5	0.3			
						2.2	0.4			
						2	0.4			
						1.9	0.4			
					Average	1.875	0.4			
					Standard Deviation	0.551238275	0.060302269			
522		33.9	-171.7	23.2		3.1	0.3	X		
			188.3			0.8	0.2			
						2.6	0.3			
						2.9	0.3			
						4	0.4			
						3.1	0.4			
						4.2	0.4			
						2.4	0.5			
						1.9	0.3			
						2.2	0.3			
						6	0.6			
						1.8	0.2			
					Average	2.916666667	0.35			
					Standard Deviation	1.349635192	0.116774842			
523		34.1	-177.1	15		1.9	0.4	X		
			182.9			3.5	0.5			
						2.7	0.4			
						4.9	0.6			
						3.4	0.4			

						3.1	0.4			
						2.6	0.4			
						1.6	0.4			
						2.4	0.4			
						1.9	0.3			
						2.7	0.4			
						3.8	0.6			
					Average	2.875	0.433333333			
					Standard Deviation	0.932372341	0.088762536			
524		37.4	-175.2	23.5		3.5	0.4	X		
			184.8			3.6	0.4			
						4	0.5			
						3.7	0.3			
						3.7	0.5			
						4.7	0.7			
						4.2	0.6			
						3.4	0.4			
						3	0.2			
						3.7	0.3			
						2.1	0.2			
						2.8	0.2			
					Average	3.533333333	0.391666667			
					Standard Deviation	0.674649179	0.162135372			
525		36.2	-179.5	19.5		2.9	0.3	X		
						2.8	0.5			
						3.5	0.6			
						3.5	0.4			
						3.6	0.5			
						3.8	0.5			
						2.5	0.3			
						0.7	0.2			
						0.5	0.2			
						2	0.2			
						1.7	0.3			

						2.2	0.3			
					Average	2.475	0.358333333			
					Standard Deviation	1.102167286	0.137895437			
526		36.7	-170.5	14.9		0.5	0.2	X		
			189.5			1.1	0.3			
						1.5	0.3			
						3.1	0.2			
						3.3	0.4			
						3.7	0.6			
						3.2	0.6			
						2.5	0.3			
						1.2	0.2			
						1.5	0.3			
						0.5	0.2			
						1	0.3			
					Average	1.925	0.325			
					Standard Deviation	1.162383914	0.142222617			
527		39.7	-171.3	12.2		1.5	0.3	X		
			188.7			1.6	0.3			
						2.3	0.3			
						2.3	0.5			
						2	0.3			
						1	0.4			
						1.6	0.4			
						1.5	0.3			
						2.9	0.6			
						2.3	0.4			
						1.8	0.4			
						3.5	0.5			
					Average	2.025	0.391666667			
					Standard Deviation	0.686393738	0.099620492			
528		30.5	-176.7	13.8		0.9	0.3	X		
						1.3	0.3			

						1.6	0.3			
						1.3	0.3			
						2	0.3			
						0.9	0.4			
						0.9	0.2			
						1.4	0.3			
						1.2	0.3			
						2.2	0.4			
						1.2	0.3			
						1.4	0.3			
					Average	1.358333333	0.308333333			
					Standard Deviation	0.412218683	0.051492865			
529		40.1	-178.3	32.5		2.1	0.3	X		
			181.7			1.4	0.2			
						0.6	0.3			
						1.3	0.2			
						3.5	0.3			
						3.7	0.4			
						4.1	0.4			
						1.3	0.2			
						1.1	0.3			
						1.1	0.2			
						1.7	0.5			
						1	0.3			
					Average	1.908333333	0.3			
					Standard Deviation	1.185870094	0.095346259			
530		42.8	-177.2	18.7		0.4	0.2	X		
			182.8			1.5	0.3			
						3.7	0.6			
						2.2	0.2			
						4.2	0.7			
						3.7	0.6			
						3.6	0.5			
						0.9	0.2			

						0.1	0.2			
						0.8	0.2			
						0	0.2			
						2.2	0.2			
					Average	1.941666667	0.341666667			
					Standard Deviation	1.545937981	0.197522534			
531		44.6	-171.3	18		0.4	0.1	X		
						1.5	0.3			
						2.2	0.2			
						6.4	0.4			
						2.1	0.3			
						1.4	0.3			
						2.8	0.4			
						2	0.5			
						3.5	0.2			
						1.6	0.1			
						1.1	0.1			
						0.9	0.1			
					Average	2.158333333	0.25			
					Standard Deviation	1.576796714	0.138169856			
532		49.2	-176.9	14		2.1	0.1	X		
			183.1			1.1	0.2			
						0.9	0.2			
						0.6	0.4			
						2.1	0.3			
						4.9	0.5			
						0.7	0.3			
						0.6	0.2			
						0.1	0.2			
						1.7	0.3			
						4.2	0.8			
						0.3	0.2			
					Average	1.608333333	0.308333333			
					Standard Deviation	1.527004396	0.188092498			

533		47.3	-172.2	14.6		0.4	0.2	X		
			187.8			0.3	0.2			
						2.7	0.2			
						3	0.5			
						2.1	0.8			
						0.1	0.2			
						0.9	0.2			
						0.8	0.2			
						0.4	0.2			
						0.6	0.2			
						0.5	0.1			
						1	0.2			
					Average	1.066666667	0.266666667			
					Standard Deviation	0.97824828	0.192275056			
534		44.8	-179.6	11.3		2.7	0.5	X		
						3.4	0.3			
						1.1	0.4			
						1.5	0.5			
						0.5	0.8			
						1.2	0.7			
						3.3	0.4			
						2.8	0.3			
						1.6	0.3			
						1.7	0.3			
						4.2	0.5			
						3.9	0.3			
					Average	2.325	0.441666667			
					Standard Deviation	1.212154356	0.167648622			
535		42.0	-172.9	11.2		2	0.2	X		
			187.1			1.1	0.2			
						3.1	0.4			
						0.6	0.2			
						0.7	0.1			

						3	0.3			
						4.5	0.4			
						1.9	0.3			
						1.8	0.2			
						3	0.3			
						0.1	0.1			
						1.7	0.3			
					Average	1.958333333	0.25			
					Standard Deviation	1.266676635	0.1			
536		51.9	-176.4	14.5		0.4	0.3	X		
			183.6			1.9	0.3			
						0.2	0.2			
						1.3	0.3			
						2.9	0.5			
						2	0.3			
						4.3	0.7			
						1.3	0.4			
						0.4	0.2			
						1	0.3			
						1.2	0.4			
						0.9	0.2			
					Average	1.483333333	0.341666667			
					Standard Deviation	1.171505118	0.144337567			
537		55.6	-171.5	13		1.8	0.2	X		
						0.4	0.2			
						2	0.3			
						4.2	0.5			
						4.3	0.1			
						2.6	0.9			
						2.1	0.6			
						1.5	0.4			
						3.2	0.5			
						2.5	0.2			
						1.5	0.2			

						0.4	0.2			
					Average	2.208333333	0.358333333			
					Standard Deviation	1.255140943	0.231431644			
538		53.7	-178.7	17.5		0.5	0.1	X		
			181.3			0.9	0.3			
						0.9	0.2			
						3.1	0.3			
						2.4	0.3			
						1.5	0.6			
						2.2	0.2			
						2.1	0.3			
						2.8	0.3			
						0.8	0.1			
						3.3	0.8			
						2.2	0.8			
					Average	1.891666667	0.358333333			
					Standard Deviation	0.953899493	0.242930343			
539		52.3	-170.3	11.6		3.1	0.8	X		
			189.7			1.6	0.2			
						5.9	0.6			
						3.6	0.7			
						1.5	0.3			
						1.7	0.3			
						0.8	0.3			
						5.7	0.5			
						0.1	0.2			
						2	0.2			
						1.5	0.3			
						0.9	0.4			
					Average	2.366666667	0.4			
					Standard Deviation	1.860270427	0.204494943			
540		59.3	-177.9	14.1		2.8	0.2	X		
			182.1			0.7	0.4			

						7	0.8			
						1.4	0.3			
						4.6	0.2			
						0.8	0.3			
						4.1	0.5			
						2.3	0.3			
						5.6	0.5			
						0.8	0.2			
						1.8	0.2			
						0.7	0.4			
					Average	2.71666667	0.358333333			
					Standard Deviation	2.13959781	0.178164037			
541		60.1	-174.0	10.5		2.5	0.3	X		
			186.0			6.1	0.6			
						2.4	0.2			
						1.4	0.3			
						2.3	0.1			
						2.6	0.3			
						3.8	0.4			
						1.4	0.3			
						0.3	0.2			
						0.3	0.3			
						2.1	0.2			
						1.6	0.3			
					Average	2.233333333	0.291666667			
					Standard Deviation	1.564569841	0.124011241			
542		63.2	-171.0	20.2		1.8	0.2	X		
			189.0			1.2	0.1			
						1.4	0.3			
						3	0.4			
						6.8	0.9			
						14.1	3.2			
						1.4	1.3			
						12.4	1.6			

						8	0.8			
						2.2	0.4			
						3.5	0.1			
						1.1	0.1			
					Average	4.741666667	0.783333333			
					Standard Deviation	4.561789588	0.907377173			
543		61.1	-177.0	28		1.1	0.1	X		
			183.0			0.5	0.2			
						1.6	0.2			
						6.1	0.4			
						14.2	2.3			
						7.7	0.9			
						7.9	0.6			
						7.3	0.8			
						2.4	0.2			
						1	0.1			
						0.4	0.1			
						1.6	0.2			
					Average	4.316666667	0.508333333			
					Standard Deviation	4.303662992	0.62879153			
544		64.8	-179.4	14.4		6.7	0.3	X		
			180.6			0.1	0.1			
						3.1	0.4			
						5.2	0.3			
						6.7	0.8			
						6.2	0.7			
						9.8	1			
						3.2	0.2			
						1.7	0.3			
						0.2	0.1			
						1	0.1			
						0.7	0.1			
					Average	3.716666667	0.366666667			
					Standard Deviation	3.15964133	0.305505046			

545	67.5	-178.3	12.9	2.6	0.3	X
		181.7		2.6	3	
				1.5	0.1	
				2.9	0.2	
				6.3	0.5	
				5.5	0.7	
				0.3	0.1	
				3.9	0.4	
				3.7	0.3	
				3	0.2	
				1.9	0.2	
				3.2	0.3	
			Average	3.116666667	0.525	
			Standard Deviation	1.634755102	0.797866473	
546	68.7	-168.2	16.1	2.4	0.2	X
		190.8		4.2	0.6	
				4.6	0.5	
				6.6	0.6	
				7.3	0.6	
				11.4	1.3	
				7.2	0.7	
				1.6	0.2	
				0.8	0.1	
				1.6	0.2	
				3.9	0.4	
				3.9	0.3	
			Average	4.625	0.475	
			Standard Deviation	3.055583563	0.327871926	
547	57.1	-172.8	19	4.2	0.4	X
		187.2		2.4	0.3	
				1.3	0.3	
				2.5	0.3	
				2.8	0.2	

						1.8	0.3			
						3.2	0.4			
						2.7	0.3			
						1.5	0.3			
						2	0.3			
						3.8	0.6			
						6.7	0.8			
					Average	2.908333333	0.375			
					Standard Deviation	1.477995161	0.16583124			
548		69.2	-165.2	19.4		2.8	0.1	X		
			194.8			1.9	0.2			
						3.1	0.1			
						1.6	0.2			
						2.2	0.2			
						3.7	0.1			
						7.1	0.5			
						3.9	0.2			
						2	0.2			
						1.3	1.2			
						5.6	1			
						1	0.1			
					Average	3.016666667	0.341666667			
					Standard Deviation	1.82449661	0.372847357			
549		65.7	-159.8	11		1	0.1	X		
			200.2			0.1	0.2			
						8.6	1.6			
						3.6	0.3			
						2.9	0.2			
						3.9	0.4			
						7	1.1			
						4.7	0.6			
						5.7	0.6			
						2.3	0.3			
						0.8	0.2			

						4.3	0.1			
					Average	3.741666667	0.475			
					Standard Deviation	2.550386186	0.453521574			
550	63.9	-165.7	10.2			2.3	0.4	X		
		194.3				2.5	0.4			
						0.2	0.2			
						6.4	0.6			
						7.2	1.1			
						9.5	1			
						9.3	1.3			
						7.5	0.8			
						0.5	0.1			
						2.3	0.2			
						2.2	0.5			
						1.9	0.3			
					Average	4.316666667	0.575			
					Standard Deviation	3.407967492	0.391094037			
551	60.0	-165.0	10.6			0.8	0.2	X		
		195.0				2.4	0.3			
						4	0.4			
						1.8	0.3			
						5	0.8			
						2.9	0.3			
						1.5	0.4			
						3.1	0.4			
						3.1	0.3			
						4.6	0.7			
						0.3	0.2			
						1.8	0.2			
					Average	2.608333333	0.375			
					Standard Deviation	1.45755607	0.191287504			
552	57.7	-161.8	17.6			0	0.1	X		
		198.2				2.3	0.3			

						2.7	0.3			
						4.4	0.3			
						2.6	0.3			
						0.3	0.2			
						2.6	0.5			
						0.1	0.1			
						2.7	0.4			
						3.3	0.7			
						0.7	0.2			
						1.2	0.2			
					Average	1.908333333	0.3			
					Standard Deviation	1.413222194	0.170560573			
553		57.9	-166.9	15.9		1.4	0.1	X		
			193.1			1.2	0.2			
						1.3	0.2			
						4.1	0.3			
						1.9	0.2			
						4.3	0.3			
						4.2	0.4			
						3.4	0.3			
						5.9	0.6			
						2.1	0.3			
						2.6	0.3			
						0	0.1			
					Average	2.7	0.275			
					Standard Deviation	1.697591877	0.135680105			
554		53.8	-169.5	22		0	0.2	X		
			190.5			0.4	0.2			
						2.4	0.2			
						3.5	0.2			
						4.8	0.4			
						4.4	0.3			
						4.7	0.5			
						3.7	0.5			

						1.7	0.2			
						2.3	0.2			
						1.4	0.2			
						1.3	0.2			
					Average	2.55	0.275			
					Standard Deviation	1.655569114	0.121543109			
555		54.4	-159.7	11.5		0.9	0.2	X		
			200.3			1.8	0.2			
						3.1	0.2			
						4	0.4			
						2.2	0.1			
						2.3	0.4			
						3	0.4			
						0.3	0.2			
						3.2	0.3			
						3	0.4			
						2	0.2			
						0.8	0.2			
					Average	2.216666667	0.266666667			
					Standard Deviation	1.119929651	0.107308674			
556		49.9	-163.7	13		1.5	0.3	X		
			196.3			1.8	0.3			
						2.7	0.2			
						6.3	0.8			
						5.3	0.7			
						4.7	0.5			
						5.6	0.5			
						5.4	0.4			
						2	0.3			
						0.4	0.2			
						1.7	0.2			
						2	0.4			
					Average	3.283333333	0.4			
					Standard Deviation	2.019375841	0.195401684			

557		55.3	-164.0	28.6		1.5	0.3	X		
			196.0			0.9	0.3			
						2.1	0.2			
						1.3	0.5			
						4.4	0.5			
						2.6	0.3			
						6.2	0.8			
						5.1	0.5			
						0.3	0.3			
						7.7	0.8			
						1.2	0.2			
						2.1	0.3			
				Average		2.95	0.416666667			
				Standard Deviation		2.345789264	0.2081666			
558		48.7	-161.5	16.1		3.2	0.3	X		
			198.5			1.5	0.3			
						3.2	0.3			
						3.2	0.5			
						5.2	0.7			
						3.9	0.4			
						3.1	0.3			
						2.7	0.4			
						1.7	0.4			
						2.6	0.3			
						3.7	0.6			
						3.5	0.5			
				Average		3.125	0.416666667			
				Standard Deviation		0.978054655	0.133711585			
559		47.6	-167.1	15		3.9	0.4	X		
			192.9			5.5	0.9			
						0.3	0.1			
						1.9	0.5			
						0.7	0.2			

						1	0.3			
						1.7	0.4			
						2.2	0.4			
						2.6	0.3			
						3	0.7			
						2.4	0.4			
						3.1	0.4			
					Average	2.358333333	0.416666667			
					Standard Deviation	1.438723129	0.212488859			
560		44.9	-165.0	13.5		2.5	0.2	X		
			195.0			2.4	0.3			
						3.4	0.4			
						3.2	0.3			
						1.3	0.3			
						2.4	0.3			
						1.5	0.3			
						1.3	0.2			
						1	0.2			
						1.8	0.2			
						0	0.2			
						1	0.1			
					Average	1.816666667	0.25			
					Standard Deviation	0.992547991	0.079772404			
561		42.4	-167.9	15.4		3.1	0.2	X		
			192.1			1.4	0.3			
						1.7	0.4			
						4.5	0.3			
						4.9	0.5			
						2.3	0.4			
						1.2	0.4			
						1.5	0.3			
						1.7	0.1			
						3.1	0.3			
						1.7	0.1			

						2.8	0.3			
					Average	2.491666667	0.3			
					Standard Deviation	1.222113172	0.120604538			
562		40.2	-163.9	12.5		4.2	0.3	X		
			196.1			1.8	0.2			
						2.2	0.4			
						3.5	0.4			
						0.2	0.2			
						0.8	0.2			
						2.5	0.3			
						3.3	0.3			
						2.5	0.2			
						1.3	0.2			
						0.6	0.3			
						2	0.3			
					Average	2.075	0.275			
					Standard Deviation	1.221865191	0.075377836			
563		43.8	-160.1	9.9		1.6	0.3	X		
			199.9			2.8	0.3			
						2.2	0.2			
						1.1	0.3			
						2.6	0.4			
						2.4	0.4			
						1.3	0.2			
						2.1	0.3			
						2.6	0.4			
						2.2	0.3			
						2	0.4			
						2.8	0.3			
					Average	2.141666667	0.316666667			
					Standard Deviation	0.561585958	0.071774056			
564		36.6	-164.6	14		2.1	0.3	X		
			195.4			2.4	0.4			

						3.8	0.5			
						5.2	0.6			
						2.1	0.4			
						1	0.3			
						1.7	0.3			
						4.4	0.5			
						1.8	0.3			
						3.3	0.3			
						2.9	0.3			
						1.2	0.3			
					Average	2.658333333	0.375			
					Standard Deviation	1.296469565	0.105528971			
565		37.7	-167.7	25.5		0.9	0.3	X		
						1	0.2			
						2.4	0.3			
						3.6	0.5			
						2.7	0.4			
						1.9	0.3			
						3.5	0.4			
						2.8	0.3			
						1.2	0.3			
						2.2	0.2			
						0.8	0.2			
						0.9	0.3			
					Average	1.991666667	0.308333333			
					Standard Deviation	1.029084618	0.090033664			
566		34.5	-164.9	11.1		3.2	0.3	X		
			195.1			2.4	0.4			
						3.6	0.5			
						3.1	0.4			
						4.8	0.8			
						3.9	0.4			
						3.8	0.3			
						4.4	0.4			

						3.4	0.5			
						2.9	0.4			
						3.7	0.5			
						2.7	0.4			
					Average	3.491666667	0.441666667			
					Standard Deviation	0.692109205	0.131137217			
567		33.3	-167.8	19.3		1.4	0.3	X		
			192.2			2	0.2			
						0.8	0.2			
						2.5	0.3			
						3.5	0.5			
						0.2	0.2			
						2.5	0.4			
						1.8	0.3			
						0.4	0.3			
						1.6	0.3			
						1.3	0.4			
						1.9	0.3			
					Average	1.658333333	0.308333333			
					Standard Deviation	0.93658794	0.090033664			
568		30.8	-165.5	11.4		2.8	0.4	X		
			194.5			3.1	0.4			
						3.7	0.3			
						2.2	0.5			
						2.8	0.6			
						2.7	0.4			
						2.8	0.5			
						5.8	0.4			
						1.6	0.5			
						3.1	0.4			
						1.9	0.4			
						4.8	0.8			
					Average	3.108333333	0.466666667			
					Standard Deviation	1.185870094	0.130267789			

569		31.3	-161.9	17		2.2	0.6	X		
			198.1			2.7	0.5			
						2.8	0.5			
						4.2	0.5			
						2.7	0.3			
						2.5	0.7			
						7	0.8			
						2.7	0.7			
						3.4	0.7			
						5	1			
						3.1	3.6			
						3.2	0.5			
					Average	3.458333333	0.866666667			
					Standard Deviation	1.359450647	0.879393731			
570		26.9	-162.9	26.7		1.8	0.5	X		
			197.1			2.3	0.5			
						2.9	0.5			
						3.4	0.4			
						3.1	0.4			
						2.8	0.5			
						2.8	0.4			
						2.1	0.5			
						2	0.4			
						2.3	0.4			
						1.7	0.2			
						2.1	0.5			
					Average	2.441666667	0.433333333			
					Standard Deviation	0.543487615	0.088762536			
571	Marci	22.3	-167.7	28.4		2.2	0.5	X		
			193.2			3.1	0.6			
						2.4	0.4			
						2.7	0.5			
						4.3	0.5			

						3.2	0.6			
						3.4	0.5			
						2.4	0.3			
						3.4	0.4			
						3	0.4			
						3.3	0.6			
						2.6	0.5			
					Average	3	0.483333333			
					Standard Deviation	0.584652189	0.093743687			
572		27.8	-167.1	18.1		2.3	0.6	X		
			192.9			2.5	0.5			
						2.9	0.5			
						2.7	0.4			
						3.4	0.4			
						1.5	0.3			
						1.5	0.3			
						1.2	0.4			
						3	0.4			
						0.8	0.5			
						2.6	0.5			
						3.1	0.7			
					Average	2.291666667	0.458333333			
					Standard Deviation	0.838243112	0.116450015			
573		20.9	-165.2	13.8		3.6	0.5	X		
			194.8			3	0.4			
						3.3	0.5			
						3.4	0.5			
						3.7	0.4			
						3.9	0.4			
						3	0.5			
						3.5	0.4			
						2.6	0.3			
						2.7	0.4			
						3.6	0.4			

						4	0.6			
					Average	3.358333333	0.441666667			
					Standard Deviation	0.450168319	0.079296146			
574		20.0	-161.2	20.4		3.3	0.5	X		
			198.8			3.2	0.5			
						3.7	0.5			
						3.7	0.4			
						4.9	0.6			
						3	0.6			
						3.8	0.4			
						2.3	0.4			
						2.1	0.5			
						3.3	0.4			
						2.6	0.5			
						3.7	0.7			
					Average	3.3	0.5			
					Standard Deviation	0.757987767	0.095346259			
575		24.9	-164.7	20		2.2	0.4	X		
						2.8	0.6			
						2.5	0.5			
						3.8	0.7			
						3	0.6			
						2.1	0.3			
						1.7	0.6			
						2.6	0.6			
						2.2	0.6			
						2.6	0.4			
						2.3	0.4			
						2.6	0.6			
					Average	2.533333333	0.525			
					Standard Deviation	0.528003673	0.121543109			
576		18.9	-165.9	18.3		2.7	0.4	X		
			194.1			2.4	0.4			

						2.8	0.7			
						4.1	0.5			
						2.5	0.3			
						2.8	0.5			
						3.2	0.4			
						2.2	0.5			
						2.1	0.4			
						3.1	0.5			
						2.3	0.4			
						2.5	0.4			
					Average	2.725	0.45			
					Standard Deviation	0.549586622	0.1			
577		16.6	-161.0	12		1.2	0.3	X		
			199.0			3.6	0.4			
						3.6	0.6			
						1.8	0.3			
						3.4	0.6			
						2	0.3			
						1.8	0.5			
						2	0.3			
						1.2	0.3			
						1.3	0.4			
						3.1	0.5			
						2.6	0.5			
					Average	2.3	0.416666667			
					Standard Deviation	0.925399177	0.119341628			
578		14.0	-166.5	18		3.8	1.3	X		
			193.5			2.6	0.6			
						2.2	0.5			
						1.1	0.4			
						3.1	0.5			
						3.2	0.6			
						2.6	0.6			
						2.5	0.6			

						2.2	0.5			
						3.5	0.7			
						2.5	0.6			
						3	0.6			
					Average	2.691666667	0.625			
					Standard Deviation	0.707695792	0.226133508			
579		11.6	-168.5	19		1.5	0.3	X		
			191.5			0.5	0.4			
						1.2	0.3			
						1.3	0.4			
						1.5	0.3			
						1	0.4			
						1.9	0.4			
						2.5	0.4			
						1.8	0.4			
						1.5	0.4			
						0.9	0.3			
						1.6	0.3			
					Average	1.433333333	0.358333333			
					Standard Deviation	0.51757008	0.051492865			
580		12.8	-162.5	16.5		2.7	0.4	X		
			197.5			1.6	0.5			
						2.2	0.4			
						2.3	0.5			
						1.7	0.6			
						2.3	0.4			
						1	0.4			
						2.2	0.5			
						3.3	0.4			
						3.1	0.5			
						1.3	0.4			
						2	0.4			
					Average	2.141666667	0.45			
					Standard Deviation	0.684182768	0.067419986			

581		9.8	-163.3	34		3.2	0.3	X		
			192.7			3.6	0.4			
						2.2	0.3			
						2.1	0.2			
						3	0.5			
						2.5	0.4			
						2.6	0.4			
						2.8	0.4			
						2.4	0.4			
						1.2	0.3			
						1.8	0.4			
						1.7	0.4			
					Average	2.425	0.366666667			
					Standard Deviation	0.678400525	0.077849894			
582		7.2	-167.4	19.5		4	0.5	X		
			192.6			3.1	0.4			
						2	0.5			
						3.4	0.5			
						2	0.6			
						2.3	0.4			
						3.3	0.5			
						2.5	0.5			
						2.5	0.4			
						2.2	0.5			
						3.4	0.3			
						3.4	0.5			
					Average	2.841666667	0.466666667			
					Standard Deviation	0.668047812	0.077849894			
583		1.0	-167.4	14.9		1.7	0.5	X		
			192.6			2.4	0.5			
						2.9	0.7			
						3.2	0.6			
						2.6	0.5			

						2.5	0.4			
						2	0.5			
						1.4	0.5			
						2.7	0.4			
						3.2	0.6			
						3.8	0.6			
						2.8	0.5			
					Average	2.6	0.525			
					Standard Deviation	0.671497648	0.08660254			
584		6.2	-164.0	31.1		1.9	0.5	X		
			196.0			3.1	0.5			
						2.7	0.6			
						3.2	0.6			
						4.6	0.6			
						4.1	0.7			
						2.2	0.5			
						4.3	0.4			
						2.8	0.6			
						2.6	0.4			
						2.6	0.4			
						3	0.6			
					Average	3.091666667	0.533333333			
					Standard Deviation	0.83715789	0.098473193			
585		9.5	-164.3	10.5		1.8	0.5	X		
						2.4	0.5			
						3.6	0.5			
						3.8	0.7			
						2	0.4			
						2.2	0.4			
						2.3	0.5			
						2.2	0.4			
						2.6	0.4			
						2	0.6			
						1.6	0.4			

						2.4	0.4			
					Average	2.408333333	0.475			
					Standard Deviation	0.66395281	0.09653073			
586		1.0	-159.5	17.5		4.1	0.3	X		
						3.8	0.2			
						2.9	0.3			
						2.8	0.3			
						3.8	0.3			
						2.9	0.3			
						2.4	0.3			
						1.3	0.3			
						3.8	0.3			
						2.7	0.3			
						4.7	0.3			
						2.7	0.3			
					Average	3.158333333	0.291666667			
					Standard Deviation	0.914984683	0.028867513			
587		3.2	-162.1	13.7		3.3	0.5	X		
			197.9			2.9	0.6			
						3.7	0.5			
						3.3	0.5			
						3	0.5			
						3.2	0.7			
						2.9	0.5			
						2.7	0.6			
						2.5	0.6			
						3.5	0.6			
						2.8	0.6			
						3.2	0.5			
					Average	3.083333333	0.558333333			
					Standard Deviation	0.345972498	0.066855792			
588		6.2	-156.6	15.5		4.4	0.6	X		
			203.4			3.7	0.4			

						2.9	0.6			
						3	0.6			
						3.7	0.5			
						2.7	0.6			
						3.7	0.5			
						3.5	0.5			
						3.7	0.6			
						3.8	0.6			
						3.1	0.5			
						2.3	0.5			
					Average	3.375	0.541666667			
					Standard Deviation	0.581729397	0.066855792			
589		0.3	-156.4	18.3		1.3	0.4	X		
			203.6			1.9	0.3			
						1.7	0.4			
						1.9	0.3			
						2.2	0.4			
						2.4	0.5			
						1.9	0.4			
						3.3	0.4			
						1.9	0.4			
						2	0.4			
						2	0.4			
						2.8	0.3			
					Average	2.108333333	0.383333333			
					Standard Deviation	0.523030215	0.057735027			
590		3.0	-155.0	17.5		2.9	0.6	X		
			250.0			3.4	0.4			
						3.4	0.6			
						4	0.6			
						3.1	0.6			
						3.4	0.5			
						3.7	0.5			
						3.2	0.4			

						3.5	0.5			
						2.3	0.4			
						2.7	0.4			
						3.2	0.5			
					Average	3.233333333	0.5			
					Standard Deviation	0.45193188	0.085280287			
591		10.9	-157.1	16.1		2.3	0.5	X		
			202.9			4.4	0.5			
						4.6	0.6			
						4.5	0.7			
						4.3	0.5			
						3.6	0.5			
						3.4	0.7			
						3.8	0.9			
						3.2	0.6			
						4	0.7			
						2.2	0.7			
						3.2	0.5			
					Average	3.625	0.616666667			
					Standard Deviation	0.805802818	0.126730446			
592	Engelhardt	3.9	-159.5	41.2		3.3	0.4	X		
			200.5			3	0.3			
						2.7	0.4			
						3.6	0.4			
						4.3	0.5			
						2.8	0.6			
						3.6	0.5			
						5.9	0.4			
						3.2	0.5			
						3.5	0.5			
						3.3	0.5			
						3.3	0.4			
					Average	3.541666667	0.45			
					Standard Deviation	0.852225251	0.079772404			

593		5.8	-149.9	9.3		5.7	0.5	X		
			210.1			3.7	0.6			
						4.1	0.5			
						3.8	0.4			
						2.9	0.4			
						2.8	0.5			
						3.6	0.6			
						2.6	0.5			
						3	0.5			
						3.1	0.5			
						2.7	0.6			
						3.8	0.6			
					Average	3.483333333	0.516666667			
					Standard Deviation	0.860056376	0.071774056			
594		15.9	-154.9	11.8		0.4	0.4	X		
			205.1			0.1	0.4			
						0.6	0.3			
						0.2	0.4			
						0.8	0.3			
						1.8	0.6			
						1.5	0.5			
						1	0.3			
						0.9	0.4			
						1.1	0.4			
						0.9	0.3			
						0.3	0.3			
					Average	0.8	0.383333333			
					Standard Deviation	0.516984262	0.094387981			
595		12.8	-158.6	32.1		0.4	0.4	X		
			201.4			2.9	0.6			
						1.5	0.4			
						3.4	0.4			
						2.5	0.5			

						1.9	0.5			
						0	0.3			
						0.7	0.3			
						0.3	0.5			
						1.9	0.5			
						1.7	0.4			
						0.3	0.3			
					Average	1.458333333	0.425			
					Standard Deviation	1.123677674	0.09653073			
596		18.9	-157.2	20.5		2.7	0.5	X		
			202.8			3.5	0.5			
						3.4	0.5			
						1.8	0.4			
						5.3	0.9			
						3.4	0.6			
						2.7	0.5			
						2.7	0.5			
						2.7	0.6			
						3.6	0.6			
						2.2	0.3			
						3.4	0.5			
					Average	3.116666667	0.533333333			
					Standard Deviation	0.887113125	0.143548113			
597		19.1	-152.8	17.7		2.9	0.5	X		
			207.2			3.4	0.4			
						2.1	0.3			
						1.9	0.4			
						4.1	0.6			
						3	0.4			
						3	0.6			
						3.1	0.5			
						3.4	0.5			
						3.6	0.6			
						2.9	0.5			

						2.8	0.6			
					Average	3.016666667	0.491666667			
					Standard Deviation	0.601261301	0.099620492			
598		13.6	-151.0	17.2		1.8	0.5	X		
			290.0			2.3	0.7			
						3.5	0.8			
						3	0.8			
						1.4	0.6			
						4	0.9			
						3.7	1			
						3.6	0.7			
						3.9	0.8			
						2.2	0.6			
						2	0.6			
						2.5	0.6			
					Average	2.825	0.716666667			
					Standard Deviation	0.900631092	0.14668044			
599		12.9	-150.6	19.6		2.6	0.5	X		
			209.4			3.9	0.6			
						2.7	0.5			
						2.5	0.5			
						3.2	0.6			
						3.4	0.5			
						3	0.5			
						3	0.6			
						3.3	0.5			
						3.8	0.5			
						3	0.6			
						2.8	0.7			
					Average	3.1	0.55			
					Standard Deviation	0.443129368	0.067419986			
600		22.5	-158.3	15.1		3.1	0.4	X		
			201.7			3.7	0.4			

						3.7	0.5			
						4.4	0.4			
						2.8	0.4			
						2.2	0.3			
						2.6	0.4			
						3	0.4			
						3.1	0.5			
						2.1	0.6			
						3.2	0.5			
						3.5	0.5			
					Average	3.11666667	0.44166667			
					Standard Deviation	0.656205807	0.079296146			
601		25.7	-159.9	17		3.9	0.6			
			200.1			2.3	0.4	X		
						2.9	0.3			
						2.6	0.5			
						3	0.5			
						3.3	0.5			
						2.5	0.4			
						3.6	0.3			
						1.6	0.5			
						4	0.6			
						2.9	0.6			
						2.5	0.4			
					Average	2.925	0.46666667			
					Standard Deviation	0.695603074	0.107308674			
602		24.2	-151.8	17.5		3.1	0.4	X		
			208.2			2.5	0.4			
						2.3	0.4			
						2.1	0.4			
						3.6	0.4			
						3.2	0.4			
						3.3	0.5			
						3.3	0.5			

						2.7	0.4			
						2.9	0.5			
						2.2	0.4			
						3	0.5			
					Average	2.85	0.433333333			
					Standard Deviation	0.487106485	0.049236596			
603		27.3	-156.3	25		2.4	0.4	X		
			204.7			2.7	0.4			
						2.6	0.5			
						3	0.3			
						3.4	0.5			
						2.7	0.4			
						2.3	0.3			
						1.9	0.4			
						2.8	0.3			
						2.1	0.4			
						2.4	0.5			
						3.3	0.5			
					Average	2.633333333	0.408333333			
					Standard Deviation	0.45193188	0.079296146			
604		29.7	-154.2	20		3	0.3	X		
			205.8			3.3	0.5			
						4.3	0.3			
						5.2	0.3			
						5.8	0.4			
						3.9	0.4			
						4.2	0.6			
						4.9	0.3			
						3.7	0.4			
						3.4	0.4			
						2	0.4			
						2.3	0.4			
					Average	3.833333333	0.391666667			
					Standard Deviation	1.133244203	0.090033664			

605		29.2	-156.8	16		2.6	0.4	X		
			203.2			3.1	0.4			
						2.2	0.4			
						3	0.3			
						2.4	0.5			
						4.4	0.4			
						2.8	0.4			
						3.6	0.4			
						2.6	0.5			
						2.6	0.7			
						2.8	0.5			
						2.8	0.3			
					Average	2.908333333	0.433333333			
					Standard Deviation	0.590005136	0.107308674			
606		31.7	-154.7	24		2.4	0.3	X		
			206.3			2.5	0.4			
						5	0.6			
						1	0.5			
						3.3	0.4			
						3.5	0.7			
						3.6	0.5			
						1.4	0.5			
						2.9	0.3			
						3.5	0.4			
						2.9	0.4			
						2.5	0.4			
					Average	2.875	0.45			
					Standard Deviation	1.053241749	0.116774842			
607		37.2	-153.2	17.5		2.1	0.3	X		
			206.2			2.1	0.3			
						2.4	0.4			
						2.2	0.3			
						3.1	0.4			

						0.8	0.3			
						2.4	0.3			
						2.7	0.3			
						3.5	0.7			
						1.2	0.3			
						0.6	0.3			
						1.4	0.3			
					Average	2.041666667	0.35			
					Standard Deviation	0.889799092	0.116774842			
608		34.6	-157.6	10.8		1	0.3	X		
			202.4			2.2	0.4			
						4	0.6			
						1.7	0.6			
						2.8	0.5			
						1.2	0.4			
						0.2	0.3			
						1.3	0.3			
						1.1	0.3			
						2.8	0.3			
						2	0.3			
						3	0.4			
					Average	1.941666667	0.391666667			
					Standard Deviation	1.068097998	0.116450015			
609		37.3	-159.3	14.7		2.5	0.3	X		
			200.7			2.8	0.3			
						2.5	0.4			
						4	0.6			
						4	0.4			
						4.7	0.3			
						4.1	0.4			
						4.8	0.4			
						3.4	0.3			
						1.4	0.3			
						2.3	0.3			

						1.1	0.3			
					Average	3.133333333	0.358333333			
					Standard Deviation	1.224249925	0.090033664			
610		34.6	-150.3	13.3		1.5	0.3	X		
			209.7			3.4	0.6			
						1.4	0.3			
						3.3	0.5			
						1.4	0.5			
						0.8	0.2			
						0.9	0.2			
						2.2	0.4			
						1.3	0.4			
						0.6	0.3			
						1.2	0.2			
						0.8	0.2			
					Average	1.566666667	0.341666667			
					Standard Deviation	0.933549758	0.137895437			
611		32.3	-151.3	15.5		1.9	0.2	X		
			208.7			1.7	0.4			
						1.9	0.4			
						3.1	0.4			
						4.1	0.6			
						2.4	0.4			
						3.1	0.6			
						0.8	0.2			
						1.9	0.4			
						2.1	0.2			
						2.3	0.2			
						2.1	0.3			
					Average	2.283333333	0.358333333			
					Standard Deviation	0.836478912	0.144337567			
612		42.1	-150.4	17.4		2.9	0.3	X		
			209.6			2.3	0.3			

						2.1	0.4			
						2.5	0.4			
						1.7	0.5			
						3.3	0.3			
						1.8	0.5			
						3.4	0.4			
						2.6	0.3			
						3	0.4			
						2.5	0.3			
						1.4	0.5			
					Average	2.458333333	0.383333333			
					Standard Deviation	0.631676461	0.083484711			
613		45.4	-153.8	14.6		0.7	0.2	X		
			206.2			0.3	0.3			
						2.1	0.3			
						3.8	0.4			
						1.8	0.3			
						2.5	0.2			
						7.8	0.6			
						2.3	0.5			
						2.4	0.3			
						1.1	0.2			
						0.4	0.2			
						1.2	0.4			
					Average	2.2	0.325			
					Standard Deviation	2.034698995	0.128805703			
614		43.2	-155.1	15.5		2.1	0.3	X		
			204.9			2.2	0.4			
						5	0.5			
						2.3	0.5			
						6	0.5			
						3.5	0.5			
						2.1	0.4			
						2.4	0.3			

						2.2	0.3			
						1.4	0.2			
						0.8	0.5			
						2.1	0.3			
					Average	2.675	0.391666667			
					Standard Deviation	1.47532739	0.108362467			
615		40.5	-159.0	10		0.3	0.3	X		
			201.0			1.6	0.3			
						2.1	0.2			
						4.6	0.5			
						3.2	0.3			
						0.8	0.5			
						0.4	0.3			
						1.6	0.3			
						2.7	0.3			
						3.1	0.4			
						2.7	0.3			
						1.3	0.2			
					Average	2.033333333	0.325			
					Standard Deviation	1.282280166	0.09653073			
616		47.7	-156.5	19.6		1.6	0.2	X		
			203.5			2	0.2			
						3.5	0.3			
						1.3	0.2			
						4.8	0.5			
						5	0.5			
						2.6	0.4			
						2.3	0.4			
						2.3	0.3			
						2	0.2			
						1.9	0.2			
						2.4	0.2			
					Average	2.641666667	0.3			
					Standard Deviation	1.187402309	0.120604538			

617		47.2	-150.9	23.9		1.8	0.3	X		
			209.1			1.2	0.3			
						1	0.3			
						1	0.2			
						0.4	0.2			
						1.4	0.3			
						2.6	0.4			
						2.9	0.4			
						3.9	0.2			
						2.9	0.4			
						2.7	0.3			
						1.5	0.2			
					Average	1.941666667	0.291666667			
					Standard Deviation	1.039631345	0.079296146			
618		55.4	-154.5	10		2.1	0.3	X		
			205.5			0.1	0.2			
						3.4	0.3			
						2.2	0.2			
						3.1	0.3			
						2	0.3			
						3	0.4			
						3.4	0.4			
						2.9	0.3			
						0.5	0.2			
						0.3	0.2			
						4.5	0.5			
					Average	2.291666667	0.3			
					Standard Deviation	1.380683845	0.095346259			
619		57.6	-152.3	27		0.9	0.2	X		
			206.7			3.7	0.3			
						0.2	0.1			
						1.3	0.1			
						0.4	0.2			

						3.4	0.4			
						4.1	0.4			
						4.7	0.7			
						7.1	0.7			
						2	0.3			
						3	0.3			
						1.6	0.3			
					Average	2.7	0.333333333			
					Standard Deviation	2.030226141	0.196946386			
620		53.5	-152.1	26		6.4	0.3	X		
			207.9			1.1	0.2			
						1.4	0.3			
						1.2	0.3			
						2.9	0.4			
						3.4	0.4			
						4.4	0.3			
						3.7	0.3			
						1.8	0.3			
						4.1	0.6			
						3	0.5			
						2.2	0.3			
					Average	2.966666667	0.35			
					Standard Deviation	1.562825724	0.108711461			
621		51.2	-151.1	10.4		2.8	0.4	X		
			208.1			1	0.2			
						1.3	0.4			
						1.9	0.3			
						1	0.2			
						6	0.7			
						2.8	0.3			
						2.2	0.3			
						1.7	0.3			
						1.1	0.3			
						2	0.3			

						3.5	0.4			
					Average	2.275	0.341666667			
					Standard Deviation	1.416220964	0.131137217			
622		59.5	-151.5	12.5		1.1	0.1	X		
			208.5			1.5	0.3			
						1.7	0.3			
						1.3	0.4			
						0.6	0.2			
						7.6	1.3			
						5.7	0.5			
						3.8	0.3			
						0.9	0.2			
						0	0.1			
						3.8	0.6			
						2.9	0.6			
					Average	2.575	0.408333333			
					Standard Deviation	2.280001994	0.328794861			
623		52.1	-154.5	14.5		1.6	0.3	X		
			205.5			3.1	0.4			
						4.6	0.3			
						3.3	0.3			
						5.2	0.6			
						1.2	0.3			
						1.9	0.3			
						4.7	0.4			
						3.3	0.3			
						0.9	0.3			
						3.4	0.5			
						4.9	0.3			
					Average	3.175	0.358333333			
					Standard Deviation	1.498559915	0.099620492			
624		60.8	-158.3	13.5		0.7	0.1	X		
			201.7			0.6	0.2			

						2.2	0.2			
						2.8	0.3			
						5.9	0.7			
						2.5	0.1			
						8.9	0.7			
						7.8	1.1			
						5	0.4			
						4	0.6			
						0.3	0.1			
						0.2	0.1			
					Average	3.408333333	0.383333333			
					Standard Deviation	2.959870493	0.324270744			
625		63.7	-155.0	11.5		0.2	0.2	X		
			205.0			1.4	0.2			
						6.7	1			
						1.5	0.3			
						4.3	0.7			
						1	0.2			
						4.3	0.5			
						5.4	0.6			
						0.3	0.3			
						5.1	0.5			
						0.9	0.3			
						0.2	0.3			
					Average	2.608333333	0.425			
					Standard Deviation	2.366223817	0.245412454			
626		65.5	-158.1	13.4		1.1	0.2	X		
			201.9			1.8	0.2			
						3	0.3			
						2.6	0.3			
						2.9	0.1			
						2.5	0.2			
						0.7	0.1			
						1.5	0.2			

						4.7	0.6			
OBLONG SHAPE						1.4	0.3			
						3	0.1			
						2.2	0.2			
					Average	2.283333333	0.233333333			
					Standard Deviation	1.08446328	0.137068883			
627		61.6	-153.8	9.7		1.3	0.1	X		
			206.2			2.6	0.3			
						0.4	0.2			
						0.6	0.2			
						0.9	0.2			
						1.7	0.4			
						0.1	0.2			
						0.3	0.1			
						1.8	0.2			
						4.6	0.2			
						3.4	0.2			
						1.6	0.1			
					Average	1.608333333	0.2			
					Standard Deviation	1.356773133	0.085280287			
628		69.1	-146.6	10.5		0.5	0.1	X		
			213.4			0.5	0.2			
						1.6	0.5			
						7.3	0.6			
						7.6	0.4			
						4.5	1			
						6.4	0.1			
						1.2	0.1			
						2.2	0.3			
						0.5	0.2			
						2.2	0.3			
						0.1	0.1			
					Average	2.883333333	0.325			
					Standard Deviation	2.811286775	0.270100991			

629		66.7	-147.8	13.7		1.5	0.1	X		
			212.2			3.3	0.3			
						1.5	0.1			
						1.8	0.1			
						9.5	0.8			
						8.3	0.7			
						1.7	0.2			
						2.6	0.2			
						3.3	0.3			
						5.1	0.3			
						2.3	0.1			
						5.9	0.5			
				Average		3.9	0.308333333			
				Standard Deviation		2.728636023	0.23915888			
630		62.9	-147.4	11		1.5	0.2	X		
			212.6			1.6	0.1			
						2.4	0.4			
						4.9	0.3			
						4.3	0.3			
						8.9	0.9			
						8.1	0			
						5.2	0.6			
						4.3	0.3			
						1.7	0.2			
						3	0.2			
						2.1	0.2			
				Average		4	0.308333333			
				Standard Deviation		2.481202055	0.23915888			
631		65.5	-140.6	11.1		3.9	0.2	X		
			219.4			1.6	0.1			
						3.3	0.3			
						1.3	0.2			
						1.4	0.2			

						5.4	0.4			
						1.6	0.3			
						1.7	0.2			
						1.6	0.1			
						8.5	1.6			
						0.3	0.1			
						0.9	0.2			
					Average	2.625	0.325			
					Standard Deviation	2.334377472	0.411482906			
632		59.7	-146.7	25.6		1.8	0.1	X		
			213.3			0.2	0.4			
						1.8	0.3			
						3.3	0.5			
						1.8	0.3			
						4.1	0.5			
						4.8	0.5			
						3.2	0.3			
						4.7	0.3			
						1.8	0.3			
						1.2	0.3			
						2.5	0.3			
					Average	2.6	0.341666667			
					Standard Deviation	1.434636476	0.116450015			
633		57.7	-149.1	13.5		4.7	0.9	X		
			210.9			1.8	0.6			
						3.2	0.4			
						3.2	0.3			
						2.1	0.4			
						3.6	0.4			
						3.7	0.3			
						1.5	0.3			
						1.3	0.3			
						8.2	1.3			
						4.7	0.9			

					3	0.3			
				Average	3.416666667	0.533333333			
				Standard Deviation	1.884305193	0.328449064			
634	59.2	-140.5	10	1	0.1	X			
		219.5		2.1	0.3				
				2.8	0.4				
				6.4	1				
				8	1.1				
				1	0.4				
				3.6	0.4				
				1.6	0.4				
				0.6	0.3				
				5.6	1.1				
				8.1	0.5				
				0.5	0.3				
				Average	3.441666667	0.525			
				Standard Deviation	2.863074741	0.34145411			
635	50.6	-149.6	24.5	2.9	0.4	X			
		210.4		0.5	0.2				
				2.8	0.3				
				6	0.7				
				2.6	0.4				
				3.3	0.4				
				3.6	0.5				
				6.1	0.6				
				5.3	0.8				
				2.9	0.4				
				0.4	0.3				
				1	0.1				
				Average	3.116666667	0.425			
				Standard Deviation	1.940399834	0.200567377			
636	52.9	-146.6	11.5	1.9	0.2	X			
		231.4		3.3	0.4				

						2.8	0.3			
						1.6	0.3			
						0.7	0.1			
						1.4	0.2			
						0.6	0.2			
						3.2	0.2			
						2.7	0.3			
						3.8	0.2			
						5.2	0.4			
						2.6	0.3			
					Average	2.483333333	0.258333333			
					Standard Deviation	1.330641222	0.090033664			
637		55.7	-145.3	8.3		1.9	0.3	X		
			214.7			3.5	0.3			
						2.4	0.3			
						0.7	0.2			
						1.1	0.2			
						1.6	0.1			
						2.3	0.4			
						2	0.3			
						1.4	0.3			
						2	0.2			
						2.7	0.3			
						1	0.2			
					Average	1.883333333	0.258333333			
					Standard Deviation	0.789514619	0.079296146			
638		42.3	-144.5	11.5		0.2	0.3	X		
			215.5			1.9	0.6			
						0.2	0.3			
						0.5	0.2			
						0.8	0.3			
						0.1	0.1			
						1.4	0.4			
						0	0.2			

						0.7	0.5			
						0.1	0.4			
						0.5	0.2			
						3.2	0.3			
					Average	0.8	0.31666667			
					Standard Deviation	0.946764826	0.140345893			
639		45.1	-141.8	33.1		1.1	0.2	X		
			218.2			3.1	0.5			
						0.8	0.2			
						2.1	0.4			
						1.2	0.2			
						2.4	0.3			
						0.2	0.2			
						0.4	0.2			
						0.4	0.1			
						1.6	0.4			
						3.8	0.4			
						1.7	0.2			
					Average	1.56666667	0.275			
					Standard Deviation	1.122767144	0.121543109			
640		42.9	-141.7	10		2.2	0.5	X		
			218.3			1.2	0.2			
						2.6	0.2			
						2.1	0.5			
						1.6	0.3			
						2.8	0.6			
						1	0.2			
						1.5	0.2			
						1.5	0.5			
						2.9	0.3			
						2.9	0.2			
						0.4	0.4			
					Average	1.89166667	0.34166667			
					Standard Deviation	0.819598941	0.150504203			

641		48.1	-145.9	9.8		1.3	0.2	X		
			214.1			1.2	0.2			
						2.3	0.3			
						3.1	0.3			
						3.7	0.5			
						1.3	0.3			
						0.3	0.1			
						1.9	0.4			
						2.54	0.3			
						0.5	0.2			
						0.6	0.2			
						1	0.3			
					Average	1.645	0.275			
					Standard Deviation	1.074468156	0.105528971			
642		50.1	-143.8	9.6		0.9	0.2	X		
			218.2			1.5	0.2			
						0.1	0.2			
						1	0.3			
						1.9	0.3			
						1.3	0.2			
						1.4	0.4			
						1.5	0.3			
						3	0.6			
						1.6	0.3			
						2.9	0.7			
						2	0.3			
					Average	1.591666667	0.333333333			
					Standard Deviation	0.806178791	0.161432977			
643		43.1	-148.7	12.5		0.6	0.2	X		
			211.3			0.6	0.4			
						1.1	0.3			
						3.3	0.6			
						1.3	0.5			

						0.8	0.5			
						0.1	0.3			
						1.1	0.4			
						1	0.2			
						0.7	0.2			
						0.2	0.2			
						0.4	0.2			
					Average	0.933333333	0.333333333			
					Standard Deviation	0.8315739	0.143548113			
644		39.1	-146.5	10		2.1	0.5	X		
			213.5			1	0.3			
						1.9	0.2			
						1.2	0.2			
						2.6	0.4			
						2.6	0.4			
						4	0.4			
						1.2	0.3			
						1.2	0.2			
						0.3	0.2			
						1.6	0.3			
						2.2	0.5			
					Average	1.825	0.325			
					Standard Deviation	0.971526447	0.113818037			
645		36.4	-149.5	14.6		1.7	0.2	X		
			210.5			1.8	0.5			
						1.4	0.3			
						4.5	0.4			
						4.6	0.5			
						4.7	0.4			
						2.1	0.4			
						1.5	0.3			
						2.2	0.4			
						2.6	0.4			
						2.7	0.5			

						2.3	0.3			
					Average	2.675	0.38333333			
					Standard Deviation	1.227062272	0.093743687			
646		38.2	-143.1	31		0.2	0.1	X		
			216.9			0.9	0.2			
						6.5	0.6			
						1.6	0.3			
						1.2	0.4			
						1.8	0.3			
						2.2	0.3			
						0.8	0.2			
						0.5	0.2			
						0.4	0.2			
						0.8	0.1			
						1	0.2			
					Average	1.491666667	0.258333333			
					Standard Deviation	1.683318332	0.137895437			
647		35.2	-141.2	21.4		2.3	0.3	X		
			218.8			3.5	0.3			
						2.2	0.3			
						1.5	0.4			
						2.4	0.3			
						2.3	0.3			
						0.6	0.3			
						0.2	0.3			
						2	0.3			
						1.9	0.2			
						0.3	0.3			
						1.7	0.2			
					Average	1.741666667	0.291666667			
					Standard Deviation	0.966209401	0.051492865			
648		34.0	-147.2	13.6		2.7	0.3	X		
			2.1.8			2.2	0.4			

						2.6	0.4			
						1.5	0.2			
						1.1	0.3			
						1.8	0.3			
						1.5	0.2			
						2.3	0.2			
						3.8	0.4			
						5.6	0.5			
						2.8	0.3			
						3.3	0.3			
					Average	2.6	0.31666667			
					Standard Deviation	1.226228512	0.093743687			
649		33.7	-139.4	21.1		3.6	0.5	X		
			220.6			2.3	0.3			
						1.6	0.5			
						3.1	0.3			
						0.9	0.4			
						1	0.3			
						2.5	0.4			
						0.5	0.2			
						1.5	0.3			
						1.8	0.3			
						2.4	0.3			
						3.4	0.4			
					Average	2.05	0.35			
					Standard Deviation	1.004987562	0.090453403			
650		32.1	-141.4	10.1		1.7	0.4	X		
			218.6			0.6	0.3			
						2.4	0.4			
						1.1	0.3			
						0.4	0.3			
						1.7	0.2			
						1.9	0.4			
						1.8	0.3			

						1.5	0.3			
						2.2	0.3			
						1.2	0.2			
						2	0.4			
					Average	1.541666667	0.316666667			
					Standard Deviation	0.612681637	0.071774056			
651		28.9	-143.4	17		0.4	0.2	X		
			216.6			2.5	0.2			
						0.9	0.3			
						2.4	0.4			
						2.8	0.3			
						0	0.2			
						0.9	0.3			
						3	0.6			
						2.2	0.3			
						2	0.4			
						1.3	0.3			
						1.3	0.3			
					Average	1.641666667	0.316666667			
					Standard Deviation	0.9774348	0.111464086			
652		27.7	-148.0	37.5		2.7	0.3	X		
			212.0			2.5	0.3			
						3.1	0.3			
						2	0.3			
						2.1	0.3			
						2.9	0.3			
						2.5	0.2			
						2.2	0.2			
						2.1	0.3			
						2.8	0.2			
						3	0.3			
						2.3	0.2			
					Average	2.516666667	0.266666667			
					Standard Deviation	0.380987552	0.049236596			

653		25.8	-141.6	16		2.1	0.4	X		
			218.4			3	0.4			
						2.9	0.4			
						3.1	0.5			
						1.7	0.3			
						2	0.4			
						3.1	0.4			
						4.3	0.4			
						2.2	0.3			
						2.8	0.3			
						2.8	0.4			
						3.2	0.4			
					Average	2.766666667	0.383333333			
					Standard Deviation	0.695875294	0.057735027			
654		23.7	-141.3	36.7		2.1	0.4	X		
			218.7			2.3	0.4			
						2.1	0.4			
						2.4	0.4			
						3.1	0.3			
						1.9	0.6			
						2.3	0.5			
						3.1	0.5			
						2.8	0.4			
						2.5	0.4			
						2.4	0.4			
						2.2	0.4			
					Average	2.433333333	0.425			
					Standard Deviation	0.384550111	0.075377836			
655		20.3	-143.5	35.5		2.3	0.4	X		
			316.5			4	0.4			
						2.3	0.3			
						3.1	0.4			
						3	0.3			

						3.1	0.3			
						2.3	0.3			
						1.9	0.4			
						2.4	0.4			
						3.3	0.5			
						2.3	0.4			
						2.4	0.4			
					Average	2.7	0.375			
					Standard Deviation	0.596962006	0.062158156			
656		23.3	-145.7	19.1		4.5	0.3	X		
			216.3			3.2	0.3			
						4.2	0.5			
						4.9	0.6			
						3.1	0.4			
						3.2	0.4			
						2.3	0.4			
						2.5	0.3			
						2.6	0.3			
						2.8	0.4			
						3	0.5			
						2.8	0.3			
					Average	3.258333333	0.391666667			
					Standard Deviation	0.829521585	0.099620492			
657		18.4	-141.3	16		2.1	0.3	X		
			218.7			0.5	0.2			
						0.3	0.2			
						0.6	0.2			
						1.3	0.3			
						1.2	0.2			
						0.5	0.3			
						2	0.2			
						0.9	0.3			
						0.4	0.2			
						1.7	0.3			

						1.5	0.2			
					Average	1.083333333	0.241666667			
					Standard Deviation	0.640785503	0.051492865			
658		16.8	-145.0	12.5		3	0.5	X		
			215.0			2.9	0.5			
						3.2	0.4			
						3.1	0.4			
						2.5	0.6			
						4.1	0.4			
						2.8	0.5			
						2.9	0.4			
						2.6	0.4			
						3.3	0.5			
						2.9	0.4			
						2.6	0.3			
					Average	2.991666667	0.441666667			
					Standard Deviation	0.425245027	0.079296146			
659		15.3	-142.7	20.3		3.1	0.5	X		
			217.3			2.3	0.5			
						3.6	0.4			
						2.8	0.4			
						2.4	0.6			
						2.9	0.4			
						3.7	0.5			
						2.5	0.4			
						3.3	0.4			
						2.7	0.5			
						3	0.4			
						2.7	0.3			
					Average	2.916666667	0.441666667			
					Standard Deviation	0.446874669	0.079296146			
660		14.8	-140.1	17		1.2	0.4	X		
			219.9			2.3	0.4			

						2.9	0.3			
						1.8	0.3			
						2.9	0.4			
						2.8	0.4			
						1.4	0.3			
						2.4	0.5			
						3.1	0.4			
						2.5	0.3			
						1.3	0.4			
						2.2	0.4			
					Average	2.233333333	0.375			
					Standard Deviation	0.666515134	0.062158156			
661		12.4	-145.7	14.6		2.2	0.5	X		
			214.3			3.2	0.5			
						2.5	0.4			
						3.8	0.6			
						2.6	0.5			
						2.5	0.4			
						3.5	0.5			
						3	0.5			
						2.8	0.5			
						2.1	0.5			
						3	0.5			
						2.8	0.4			
					Average	2.833333333	0.483333333			
					Standard Deviation	0.503322296	0.057735027			
662		11.5	-148.3	28.3		3.7	0.4	X		
			211.7			3.2	0.5			
						3.1	0.6			
						1.8	0.4			
						3	0.6			
						4.3	0.5			
						2.6	0.4			
						2.4	0.4			

						3	0.4			
						3.6	0.5			
						3.9	0.6			
						3.6	0.4			
					Average	3.183333333	0.475			
					Standard Deviation	0.695221787	0.08660254			
663		8.0	-144.0	37.5		3.1	0.4	X		
			216.0			2.4	0.4			
						2.6	0.4			
						3	0.4			
						3.7	0.4			
						3.4	0.5			
						4.1	0.5			
						4.4	0.6			
						2.3	0.5			
						3	0.5			
						3.7	0.6			
						2.9	0.5			
					Average	3.216666667	0.475			
					Standard Deviation	0.658970731	0.075377836			
664		8.1	-140.2	10		2.7	0.5	X		
			219.8			2	0.4			
						2.6	0.4			
						2.1	0.4			
						2.6	0.3			
						0.4	0.3			
						3	0.5			
						3.9	0.4			
						2.7	0.4			
						2.7	0.3			
						2.8	0.4			
						3.1	0.5			
					Average	2.55	0.4			
					Standard Deviation	0.830662386	0.073854895			

665	2.3	-143.6	9	4.4	0.4	X	
		216.4		3.3	0.4		
				3	0.4		
				3.9	0.4		
				2.7	0.5		
				3.3	0.3		
				3.1	0.4		
				2.4	0.3		
				3.2	0.5		
				5.1	0.5		
				4.1	0.5		
				4.6	0.4		
			Average	3.591666667	0.416666667		
			Standard Deviation	0.821814327	0.071774056		
666	3.1	-148.2	21.3	3.2	0.4	X	
		211.8		3.9	0.5		
				3.7	0.4		
				3.9	0.5		
				3.6	0.5		
				3.2	0.6		
				3.6	0.5		
				2	0.4		
				2.7	0.5		
				2.8	0.5		
				8.1	0.2		
				3.1	0.4		
			Average	3.65	0.45		
			Standard Deviation	1.507255181	0.1		
667	0.2	-147.0	16.4	2.6	0.5	X	
		213.0		4.5	0.5		
				2.9	0.5		
				2.3	0.6		
				3.7	0.4		

						3.9	0.6			
						4.7	0.5			
						3	0.5			
						4.1	0.5			
						4	0.7			
						3.2	0.5			
						3.3	0.5			
					Average	3.516666667	0.525			
					Standard Deviation	0.752973902	0.075377836			
668		1.5	-133.2	20.6		0.2	0.3	X		
			226.8			1.8	0.3			
						1.6	0.4			
						0.4	0.3			
						0.4	0.5			
						1.1	0.4			
						0	0.3			
						1	0.3			
						1.4	0.3			
						0.7	0.3			
						0.1	0.4			
						0	0.3			
					Average	0.725	0.341666667			
					Standard Deviation	0.641199161	0.066855792			
669		4.2	-138.1	12.1		2.9	0.3	X		
			221.9			2.2	0.4			
						1.7	0.4			
						1.4	0.4			
						2.1	0.4			
						1.8	0.4			
						1.8	0.5			
						2.9	0.5			
						2	0.4			
						2.4	0.5			
						2	0.4			

						0.6	0.6			
					Average	1.983333333	0.433333333			
					Standard Deviation	0.62643774	0.077849894			
670		6.1	-137.5	35.6		2.8	0.4	X		
			222.5			1.7	0.4			
						2.5	0.3			
						1.6	0.4			
						1.8	0.3			
						2.3	0.4			
						1.9	0.4			
						1.6	0.4			
						2.5	0.4			
						1.2	0.4			
						1.7	0.3			
						1.8	0.4			
					Average	1.95	0.375			
					Standard Deviation	0.470009671	0.045226702			
671		5.8	-133.4	22.1		1.8	0.4	X		
			226.6			1.9	0.3			
						2	0.4			
						2.4	0.4			
						2.2	0.4			
						2.1	0.4			
						2.1	0.4			
						1.6	0.4			
						1.7	0.4			
						0.4	0.3			
						0.5	0.3			
						1.5	0.4			
					Average	1.683333333	0.375			
					Standard Deviation	0.630776337	0.045226702			
672	KUO	8.1	-134.4	29.1		3.1	0.4	X		
	SHOU		225.6			2.3	0.6			

	CHING					2.8	0.5			
						1.5	0.4			
						3.2	0.4			
						2.1	0.3			
						3	0.4			
						3.5	0.3			
						2.8	0.4			
						3.1	0.4			
						3.6	0.4			
						3.5	0.5			
					Average	2.875	0.416666667			
					Standard Deviation	0.629754642	0.083484711			
673		7.6	-136.9	15.4		2	0.5	X		
			223.1			2.5	0.3			
						2.8	0.5			
						2.7	0.5			
						1.8	0.4			
						2.3	0.4			
						2.5	0.4			
						1.4	0.4			
						2.6	0.4			
						2.6	0.4			
						2.4	0.4			
						2.1	0.5			
					Average	2.308333333	0.425			
					Standard Deviation	0.412218683	0.062158156			
674		10.5	-131.5	36.3		2.1	0.4	X		
			228.5			4.9	0.4			
						3.4	0.4			
						3.1	0.4			
						2	0.4			
						4.3	0.4			
						3.3	0.7			
						2.9	0.5			

						1.5	0.4			
						0.5	0.4			
						2.3	0.4			
						0.1	0.5			
					Average	2.533333333	0.441666667			
					Standard Deviation	1.419560325	0.090033664			
675		15.2	-135.7	18.5		3.1	0.4	X		
			224.3			2.4	0.4			
						1.8	0.5			
						3.3	0.5			
						3.9	0.6			
						2.1	0.5			
						2.5	0.3			
						2.3	0.4			
						2.1	0.4			
						2.3	0.4			
						2.1	0.6			
						0.3	0.7			
					Average	2.35	0.475			
					Standard Deviation	0.883690608	0.113818037			
676		12.0	-137.8	20		2.7	0.4	X		
			222.2			2.9	0.5			
						2.2	0.4			
						2.9	0.4			
						2.3	0.4			
						1.7	0.4			
						1.1	0.3			
						2.4	0.4			
						2.8	0.4			
						1.9	0.5			
						2.7	0.4			
						2.6	0.4			
					Average	2.35	0.408333333			
					Standard Deviation	0.550206573	0.051492865			

677		18.3	-131.1	14.6		3.1	0.5	X		
			228.9			3.4	0.5			
						2.6	0.3			
						3.4	0.4			
						3.3	0.5			
						4.5	0.4			
						2.2	0.5			
						2.2	0.4			
						2.6	0.5			
						3.8	0.6			
						3.3	0.5			
						1.8	0.4			
					Average	3.01666667	0.458333333			
					Standard Deviation	0.764951969	0.079296146			
678		12.1	-133.7	14.7		4.6	0.4	X		
			226.3			2.5	0.5			
						1	0.4			
						3.2	0.8			
						4.7	0.8			
						1.9	0.5			
						2.6	0.4			
						3.6	0.6			
						3.6	0.4			
						1.3	0.4			
						2.1	0.4			
						0.3	0.4			
					Average	2.61666667	0.5			
					Standard Deviation	1.3835615	0.153741223			
679		19.7	-139.8	10.3		2.1	0.4	X		
			220.2			2.2	0.4			
						1.9	0.3			
						1.8	0.4			
						1.8	0.3			

						1.8	0.3			
						2.7	0.3			
						2.2	0.4			
						1.9	0.3			
						2.2	0.3			
						2.2	0.4			
						2	0.4			
					Average	2.066666667	0.35			
					Standard Deviation	0.260535579	0.052223297			
680		23.2	-136.3	21.1		1.6	0.4	X		
			223.7			2.8	0.3			
						1.1	0.3			
						0.8	0.3			
						0.5	0.3			
						1.9	0.4			
						2.2	0.3			
						1.3	0.2			
						0.6	0.3			
						0.2	0.3			
						1.5	0.4			
						1.2	0.2			
					Average	1.308333333	0.308333333			
					Standard Deviation	0.750101003	0.066855792			
681		21.5	-130.7	11		2.6	0.4	X		
			229.3			2.6	0.5			
						3.5	0.5			
						3.5	0.6			
						4.6	0.6			
						4.1	0.6			
						4.6	0.5			
						3.8	0.5			
						4.3	0.5			
						3.9	0.4			
						4.9	0.6			

						3	0.6			
					Average	3.783333333	0.525			
					Standard Deviation	0.770871211	0.075377836			
682		20.2	-136.0	11.4		1.8	0.4	X		
			224.0			1.8	0.3			
						2	0.4			
						1.1	0.4			
						1.3	0.5			
						1.9	0.3			
						2.1	0.5			
						3	0.4			
						1.5	0.4			
						1.9	0.4			
						3	0.5			
						1.3	0.4			
					Average	1.891666667	0.408333333			
					Standard Deviation	0.603713257	0.066855792			
683		27.5	-135.7	19		2.1	0.4	X		
			224.3			1.8	0.3			
						3.8	0.4			
						1.4	0.4			
						2.6	0.4			
						2.3	0.4			
						0.6	0.3			
						1.3	0.3			
						2	0.4			
						1	0.3			
						2.7	0.4			
						1.1	0.4			
					Average	1.891666667	0.366666667			
					Standard Deviation	0.889799092	0.049236596			
684		25.7	-130.4	17.1		3.7	0.4	X		
			229.6			4.7	0.7			

						3.5	0.6			
						2.6	0.4			
						3.6	0.6			
						1.8	0.6			
						4.1	0.5			
						1.3	0.3			
						3.5	0.4			
						3	0.4			
						2.1	0.3			
						3.4	0.5			
					Average	3.108333333	0.475			
					Standard Deviation	0.989451945	0.128805703			
685		29.7	-138.3	13.5		3.2	0.4	X		
			221.7			3	0.5			
						2	0.3			
						3.9	0.3			
						3.2	0.5			
						1.2	0.3			
						1.3	0.4			
						1.3	0.4			
						2.4	0.3			
						3.2	0.3			
						3	0.4			
						2.4	0.3			
					Average	2.508333333	0.366666667			
					Standard Deviation	0.892858874	0.077849894			
686		32.6	-134.9	18.2		1.7	0.4	X		
			225.1			3.1	0.4			
						4	0.4			
						2.3	0.3			
						2.4	0.8			
						1	0.3			
						2	0.4			
						1.1	0.4			

						1.9	0.4			
						3.2	0.6			
						1.6	0.3			
						3.5	0.6			
					Average	2.316666667	0.441666667			
					Standard Deviation	0.954256811	0.150504203			
687		34.1	-137.2	18.9		0.5	0.3	X		
			222.8			2	0.4			
						2.6	0.4			
						3.6	0.5			
						1.1	0.2			
						4.4	0.4			
						0.4	0.2			
						0.9	0.2			
						0.9	0.4			
						0.9	0.4			
						2.2	0.5			
						0.1	0.2			
					Average	1.633333333	0.341666667			
					Standard Deviation	1.34727559	0.116450015			
688		30.5	-133.5	15.2		2	0.3	X		
			227.5			1.8	0.5			
						1.2	0.5			
						1.7	0.4			
						1.5	0.3			
						2.9	0.3			
						1.7	0.3			
						2.1	0.5			
						2.2	0.4			
						2.5	0.6			
						3.8	0.6			
						2.5	0.7			
					Average	2.158333333	0.45			
					Standard Deviation	0.701243484	0.138169856			

689		38.6	-138.5	15.7		0.1	0.2	X		
			221.5			0.4	0.3			
						0.4	0.4			
						0.9	0.3			
						2.7	0.4			
						1.5	0.4			
						2.5	0.3			
						3.7	0.6			
						0.9	0.2			
						1.6	0.2			
						0.5	0.3			
						0.8	0.4			
					Average	1.333333333	0.333333333			
					Standard Deviation	1.109736523	0.115470054			
690		37.1	-132.3	17		2.3	0.4	X		
			227.7			2.4	0.3			
						1.7	0.5			
						1.6	0.6			
						3.7	0.4			
						4.9	0.5			
						4.1	0.3			
						3.7	0.5			
						4.1	0.5			
						3.2	0.4			
						3.1	0.4			
						1	0.3			
					Average	2.983333333	0.425			
					Standard Deviation	1.18921925	0.09653073			
691		36.3	-137.9	10		2.7	0.3	X		
			222.1			2.9	0.3			
						3.4	0.3			
						3	0.4			
		OBLONG				0.8	0.3			

						2.4	0.4			
						2.1	0.4			
						1.4	0.3			
						1.2	0.3			
						1.5	0.3			
						0.2	0.3			
						0.3	0.3			
					Average	1.825	0.325			
					Standard Deviation	1.082190539	0.045226702			
692	Theil	40.4	-134.3	30.4		4.1	0.5	X		
			225.7			2.8	0.4			
						3.6	0.4			
						2.3	0.6			
						5.7	0.5			
						4.9	0.4			
						4.2	0.3			
						3.8	0.5			
						0	0.4			
						1.3	0.4			
						0.8	0.2			
						2.2	0.4			
					Average	2.975	0.416666667			
					Standard Deviation	1.717357907	0.10298573			
693		44.7	-130.4	16		1.2	0.3	X		
			229.4			1.3	0.2			
						4.3	0.5			
						1.4	0.3			
						1.4	0.3			
						2.6	0.5			
						0.8	0.3			
						1.8	0.3			
						3	0.3			
						2.4	0.3			
						1.1	0.2			

						3.8	0.4			
					Average	2.091666667	0.325			
					Standard Deviation	1.131739075	0.09653073			
694		41.7	-139.4	15.5		4.1	0.4	X		
			220.6			1.8	0.2			
						1.5	0.2			
						3.3	0.4			
						2.2	0.4			
						4.5	0.6			
						0.5	0.1			
						1.1	0.2			
						1.4	0.2			
						0.7	0.2			
						2.9	0.3			
						3.7	0.5			
					Average	2.308333333	0.308333333			
					Standard Deviation	1.360119202	0.150504203			
695		42.2	-129.9	34.2		2.2	0.4	X		
			230.1			3.6	0.5			
						4.6	0.6			
						3.2	0.4			
						3.2	0.3			
						0.2	0.5			
						1.9	0.4			
						1.6	0.4			
						2	0.3			
						1.2	0.4			
						1.7	0.3			
						3.9	0.4			
					Average	2.441666667	0.408333333			
					Standard Deviation	1.266676635	0.090033664			
696		49.2	-136.6	11.1		5.8	0.6	X		
			223.4			3.3	0.4			

						1.6	0.2			
						1.6	0.6			
						2.1	0.2			
						0.5	0.2			
						2.4	0.3			
						1.7	0.3			
						1.3	0.4			
						1.8	0.3			
						3.4	0.3			
						2.6	0.3			
					Average	2.341666667	0.341666667			
					Standard Deviation	1.362122897	0.137895437			
697		49.6	-129.9	11.2		0.6	0.3	X		
			230.1			1.3	0.3			
						0.7	0.3			
						2.2	0.3			
						3.4	0.3			
						3.2	0.4			
						1	0.3			
						2.5	0.3			
						1.4	0.2			
						0.2	0.2			
						0.6	0.2			
						0.2	0.2			
					Average	1.441666667	0.275			
					Standard Deviation	1.123677674	0.062158156			
698		45.3	-134.9	8.6		1.3	0.3	X		
			225.1			4.7	0.7			
						3.1	0.4			
						1.9	0.3			
						5.3	0.5			
						4.9	0.4			
						5.2	0.6			
						4.7	0.5			

						3	0.5			
						1.9	0.4			
						1.6	0.2			
						2.1	0.3			
					Average	3.308333333	0.425			
					Standard Deviation	1.551221415	0.142222617			
699		53.2	-133.2	10.5		1.8	0.2	X		
			226.8			2.8	0.3			
						2.8	0.2			
						1.6	0.6			
						2.3	0.4			
						0.6	0.4			
						2.7	0.4			
						0.8	0.2			
						2.2	0.2			
						3.2	0.6			
						2.9	0.3			
						3.1	0.3			
					Average	2.233333333	0.341666667			
					Standard Deviation	0.868994543	0.144337567			
700		56.5	-138.5	16.1		4.9	1.1	X		
			221.5			4.9	0.4			
						2	0.5			
						1.2	0.4			
						3.3	0.3			
						4.5	0.5			
						1.4	0.5			
						4.5	0.4			
						2	0.3			
						0.5	0.3			
						2.3	0.4			
						3.2	0.7			
					Average	2.891666667	0.483333333			
					Standard Deviation	1.544761431	0.224957909			

701	52.4	-138.8	32.6	0.2	0.3	X		
		221.2		0.7	0.2			
				0.4	0.2			
				2.4	0.2			
				0.3	0.3			
				0.6	0.2			
				3.6	0.5			
				4.9	0.6			
				1.1	0.2			
				1.2	0.2			
				2	0.2			
				0.4	0.3			
			Average	1.483333333	0.283333333			
			Standard Deviation	1.485587324	0.133711585			
702	55.1	-134.0	10.7	0.8	0.2	X		
		226.0		2.4	0.5			
				0.8	0.2			
				2.3	0.3			
				4.6	0.5			
				5.4	0.4			
				5	0.5			
				5.5	0.6			
				2.4	0.3			
				1	0.4			
				4.5	0.5			
				1.3	0.3			
			Average	3	0.391666667			
			Standard Deviation	1.873256765	0.131137217			
703	50.3	-130.6	11.6	2.1	0.4	X		
		229.4		0.3	0.1			
				4.2	0.4			
				3	0.2			
				1.1	0.1			

						3.8	0.3			
						4.5	1.2			
						1.9	0.9			
						1.4	0.5			
						1.6	0.3			
						0.2	0.1			
						2.3	0.3			
					Average	2.2	0.4			
					Standard Deviation	1.427649053	0.335748824			
704		59.6	-130.8	12		0.7	0.3	X		
			229.2			6.2	1.3			
						6	0.6			
						0.5	0.4			
						0.6	0.4			
						1.9	0.4			
						2.8	0.5			
						0.4	0.1			
						4.3	0.3			
						7	0.4			
						6.9	1			
						2.6	0.2			
					Average	3.325	0.491666667			
					Standard Deviation	2.63443111	0.339674532			
705		60.1	-135.9	12.2		2	0.2	X		
			224.1			0.1	0.2			
						6.2	0.9			
						4.3	0.4			
						3.7	0.5			
						0.5	0.1			
						1.3	0.1			
						0.6	0.1			
						2.8	0.5			
						1.9	0.4			
						0.5	0.2			

						3	0.5			
					Average	2.241666667	0.341666667			
					Standard Deviation	1.842161938	0.23915888			
706		66.9	-137.3	14.3		1.1	0.2	X		
			222.7			0	0.2			
						2	0.4			
						6.3	0.6			
						0.3	0.1			
						8.8	0.6			
						4	0.4			
						11.8	1.4			
						3.7	0.4			
						2.9	0.4			
						0.8	0.2			
						1.4	0.1			
					Average	3.591666667	0.416666667			
					Standard Deviation	3.662701024	0.3537676			
707		61.2	-137.4	11		1.3	0.2	X		
			222.6			3.2	0.3			
						1.4	0.2			
						4.3	0.4			
						1.7	0.3			
						1.4	0.4			
						6.8	0.8			
						5.1	0.7			
						1.4	0.4			
						2.5	0.3			
						3.7	0.7			
						2.6	0.3			
					Average	2.95	0.416666667			
					Standard Deviation	1.750584318	0.203752672			
708		62.0	-144.1	9.7		0.5	0.1	X		
			215.9			5.1	0.1			

		0.0				1.6	0.2			
						5.5	0.9			
						7	0.7			
						1.3	0.2			
						4.6	0.2			
						0.5	0.1			
						1.8	0.3			
						1.5	0.3			
						0.5	0.2			
						0.1	0.1			
					Average	2.5	0.283333333			
					Standard Deviation	2.372570528	0.255247948			
709		69.4	-135.6	27.2		2.2	0.1	X		
			224.6			0.1	0.2			
						1.2	0.1			
						1.8	0.2			
						8.6	1.2			
						9.3	1			
						1.6	0.2			
						13.8	2.4			
						18.4	5.3			
						17.3	3.5			
						0.4	0.2			
						3.1	0.3			
					Average	6.483333333	1.225			
					Standard Deviation	6.783647897	1.673387962			
710		65.2	-132.7	9.2		7.5	0.4	X		
			227.3			6.9	0.6			
						8.5	0.6			
						3.5	0.2			
						3.9	0.8			
						10.7	1.4			
						3.3	0.3			
						5.3	0.9			

						5.3	0.4			
						2.4	0.2			
						8.2	0.5			
						5.1	0.4			
					Average	5.883333333	0.558333333			
					Standard Deviation	2.500484801	0.34234043			
711		65.0	-128.9	9.9		3.3	0.2	X		
						8.5	0.5			
						3.3	0.3			
						1.4	0.2			
						7.7	0.7			
						9.7	1.9			
						10.1	1.5			
						6.1	0.6			
						1.1	0.4			
						3.1	0.3			
						4.2	0.5			
						1.4	0.1			
					Average	4.991666667	0.6			
					Standard Deviation	3.303017445	0.549379816			
712		67.3	-229.0	10.5		2.7	0.2	X		
			231.0			0.7	0.1			
						7.7	1.1			
						9.7	0.7			
						5.1	0.4			
						8.8	2.1			
						11.2	2.5			
						7	1.2			
						4.2	0.3			
						2.8	0.3			
						4	0.6			
						1.5	0.3			
					Average	5.45	0.816666667			
					Standard Deviation	3.389153823	0.776745347			

713	67.1	-122.9	38	3.1	0.2	X	
		237.1		2.5	0.4		
				4.8	0.6		
				1.9	0.1		
				2.6	0.2		
				13.6	2		
				11.6	1.3		
				7.6	0.5		
				3.7	0.5		
				1.9	0.1		
				5.9	0.5		
				0.3	0.2		
			Average	4.958333333	0.55		
			Standard Deviation	4.086887754	0.561653403		
714	60.2	-123.2	14.6	0.5	0.3	X	
		236.8		3.1	0.5		
				1.2	0.3		
				6.4	0.6		
				5.6	0.4		
				7.7	0.5		
				1.5	0.3		
				0.7	0.2		
				1.9	0.1		
				3.4	0.4		
				8	1		
				1.7	0.2		
			Average	3.475	0.4		
			Standard Deviation	2.743628984	0.23741027		
715	62.5	-128.3	25	1.6	0.4	X	
		237.7		2.3	0.3		
				4	0.4		
				7.3	1.2		
				2.4	0.2		

						1.2	0.1			
						2.3	0.6			
						5.2	0.5			
						0.4	0.3			
						2.5	0.2			
						2.8	0.4			
						1.2	0.4			
					Average	2.76666667	0.41666667			
					Standard Deviation	1.918964367	0.282306517			
716		61.3	-126.2	40		0.7	0.2	X		
			233.8			5.9	0.5			
						5.5	0.4			
						0.8	0.3			
						0.7	0.3			
						2.2	0.3			
						4	0.3			
						5.3	0.5			
						12.9	2.4			
						3.2	0.2			
						3	0.3			
						0.1	0.1			
					Average	3.69166667	0.483333333			
					Standard Deviation	3.538478958	0.614718462			
717		57.8	-125.0	15.1		0.2	0.1	X		
			235.0			0.9	0.1			
						1.2	0.3			
						1.3	0.3			
						7.1	0.8			
						9.5	0.9			
						0.1	0.3			
						1.8	0.3			
						1.6	0.3			
						1.6	0.2			
						2.3	0.2			

						2.9	0.4			
					Average	2.541666667	0.35			
					Standard Deviation	2.847473628	0.250454133			
718		50.1	-128.0	16.5		2.3	0.1	X		
						1.7	0.4			
						1.3	0.4			
						2.3	0.3			
						3.9	0.4			
						1.5	0.6			
						1.5	0.3			
						2	0.3			
						3	0.4			
						3.8	0.4			
						1.6	0.1			
						0.6	0.2			
					Average	2.125	0.325			
					Standard Deviation	1.001929956	0.142222617			
719		54.4	-129.9	11.9		2.7	0.3	X		
			230.1			0.4	0.3			
						3.7	0.6			
						4.8	0.6			
						7.2	0.5			
						6.8	0.5			
						1.4	0.3			
						1.3	0.4			
						3.5	0.3			
						0.6	0.2			
						1.6	0.3			
						1.4	0.3			
					Average	2.95	0.383333333			
					Standard Deviation	2.308285472	0.133711585			
720		57.1	-121.2	12.9		1.9	0.4	X		
			238.8			4.1	0.7			

						2.2	0.4			
						3.1	0.3			
						4.7	0.2			
						2.5	0.2			
						0.3	0.2			
						3	0.3			
						3.6	0.7			
						7.3	0.8			
						6.4	0.4			
						1.1	0.3			
					Average	3.35	0.408333333			
					Standard Deviation	2.046060516	0.210878394			
721	Webster	50.3	-123.4	41.5		1.1	0.3	X		
			236.6			2.6	0.3			
						2.5	0.4			
						3.4	0.4			
						5.4	0.6			
						6.9	0.6			
						1.4	0.3			
						3.6	0.3			
						6.5	0.7			
						0.4	0.2			
						0.5	0.3			
						5.3	0.8			
					Average	3.3	0.433333333			
					Standard Deviation	2.287118075	0.192275056			
722		50.8	-120.9	10.2		3.1	0.2	X		
			239.1			0.8	0.2			
						2.5	0.3			
						2.6	0.2			
						2.2	0.2			
						6.2	0.6			
						1.5	0.1			
						1.4	0.2			

						4.3	0.4			
						3.7	0.6			
						2	0.2			
						3.4	0.2			
					Average	2.808333333	0.283333333			
					Standard Deviation	1.472449001	0.164224532			
723		54.7	-123.4	8.8		6.2	0.6	X		
			236.6			2.9	0.5			
						1.6	0.1			
						3.3	0.2			
						3.9	0.5			
						2.6	0.5			
						0.9	0.2			
						0.5	0.2			
						0.8	0.3			
						0.7	0.2			
						3.5	0.5			
						4.7	0.5			
					Average	2.633333333	0.358333333			
					Standard Deviation	1.798652694	0.172986249			
724		48.7	-124.4	22.5		1.1	0.3	X		
			235.6			2.1	0.5			
						2.5	0.4			
						4.1	0.6			
						5.1	0.5			
						2.9	0.5			
						3.4	0.4			
						3.8	0.5			
						1.6	0.3			
						2.7	0.5			
						3.6	0.3			
						4.6	0.5			
					Average	3.125	0.441666667			
					Standard Deviation	1.20160877	0.099620492			

725		46.5	-128.4	13		2.6	0.4	X		
			237.6			4.7	0.6			
						3.3	0.4			
						6.3	0.7			
						4.2	0.5			
						2.1	0.4			
						1.2	0.4			
						2.5	0.4			
						1.4	0.2			
						2.6	0.3			
						4	0.7			
						3.6	0.4			
					Average	3.208333333	0.45			
					Standard Deviation	1.456308118	0.150755672			
726		43.9	-126.9	11.6		2.2	0.4	X		
			233.1			2.2	0.2			
						2.7	0.3			
						3.7	0.4			
						7.1	0.7			
						2.7	0.4			
						3.4	0.5			
						1.3	0.3			
						3.1	0.4			
						1.4	0.2			
						2.2	0.4			
						2.6	0.5			
					Average	2.883333333	0.391666667			
					Standard Deviation	1.508059158	0.137895437			
727		46.8	-126.7	15.5		2.1	0.3	X		
			233.3			1	0.2			
						1.9	0.2			
						3.2	0.3			
						2.8	0.4			

						3.9	0.3			
						5.2	0.7			
						3.9	0.5			
						0.7	0.3			
						2.5	0.3			
						1.6	0.3			
						0.8	0.4			
					Average	2.466666667	0.35			
					Standard Deviation	1.39761702	0.138169856			
728		49.7	-129.9	11.6		0.1	0.2	X		
			230.1			2.7	0.3			
						0.8	0.3			
						2.6	0.3			
						2.8	0.4			
						4.2	0.5			
						2.2	0.3			
						2.2	0.3			
						1	0.2			
						2.1	0.5			
						3.9	0.4			
						6.5	1.1			
					Average	2.591666667	0.4			
					Standard Deviation	1.709044567	0.241209076			
729		44.1	-123.9	10.4		1.9	0.3	X		
			236.1			3.7	0.3			
						0.3	0.2			
						0.8	0.3			
						3.3	0.4			
						3.6	0.3			
						2.8	0.2			
						1.9	0.3			
						0.5	0.1			
						3.2	0.3			
						3.6	0.3			

						3.9	0.5			
					Average	2.458333333	0.291666667			
					Standard Deviation	1.330384998	0.099620492			
730		35.7	-124.6	19.5		4	0.5	X		
			235.4			3.4	0.5			
						4.5	0.5			
						4.3	0.5			
						5.6	0.5			
						3.8	0.5			
						4.4	0.5			
						3.9	0.5			
						2.7	0.3			
						3.2	0.2			
						2.8	0.5			
						4	0.5			
					Average	3.883333333	0.458333333			
					Standard Deviation	0.802080628	0.099620492			
731		38.4	-126.0	12.9		2.8	0.4	X		
			234.0			4	0.5			
						5.1	0.7			
						4.5	0.9			
						1.9	0.3			
						2.7	0.5			
						3.4	0.4			
						4	0.4			
						3.4	0.4			
						3	0.4			
						3.2	0.6			
						3.9	0.7			
					Average	3.491666667	0.516666667			
					Standard Deviation	0.867030809	0.174945879			
732		32.3	-121.9	11		3.3	0.4	X		
			238.1			2.9	0.2			

						3.9	0.3			
						3.6	0.4			
						3	0.5			
						3.5	0.4			
						2.9	0.4			
						4.2	0.4			
						4.6	0.5			
						1.2	0.3			
						2.2	0.5			
						5.1	0.4			
					Average	3.366666667	0.391666667			
					Standard Deviation	1.053421554	0.090033664			
733		31.7	-123.5	17.5		3	0.3	X		
			236.5			2.3	0.4			
						3	0.4			
						0.6	0.4			
						4.4	0.4			
						4.6	0.6			
						3.4	0.4			
						3	0.5			
						2.6	0.4			
						2.9	0.4			
						2.8	0.3			
						2.3	0.3			
					Average	2.908333333	0.4			
					Standard Deviation	1.023770512	0.085280287			
734		39.6	-129.3	15.6		1.8	0.4	X		
			230.7			2.4	0.6			
						2.3	0.4			
						2.7	0.3			
						4	0.6			
						4	0.5			
						3.2	0.3			
						4.2	0.6			

						3.4	0.6			
						2.9	0.5			
						3.2	0.5			
						3	0.3			
					Average	3.091666667	0.466666667			
					Standard Deviation	0.736648841	0.123091491			
735		37.0	-121.1	10.3		3.5	0.4	X		
			238.9			4.2	0.5			
						2.9	0.3			
						4.5	0.6			
						4.8	0.8			
						3.1	0.6			
						3.8	0.5			
						4.3	0.5			
						2.9	0.5			
						3.3	0.4			
						3.4	0.4			
						4.2	0.5			
					Average	3.741666667	0.5			
					Standard Deviation	0.648716682	0.12792043			
736		33.3	-127.9	13.9		3.3	0.6	X		
			232.1			3.8	0.4			
						2.7	0.5			
						1.9	0.5			
						3.6	0.6			
						2.1	0.4			
						2.9	0.5			
						4.1	0.5			
						4.3	0.5			
						3.6	0.4			
						5.6	0.6			
						1.3	0.4			
					Average	3.266666667	0.491666667			
					Standard Deviation	1.178082674	0.079296146			

737		28.7	-123.8	18.5		2.5	0.3	X		
			236.2			2.6	0.4			
						3.4	0.3			
						2.4	0.3			
						2.5	0.4			
						3.5	0.4			
						3.5	0.5			
						3	0.3			
						3	0.4			
						2.7	0.3			
						2.4	0.4			
						3.7	0.5			
				Average	2.933333333		0.375			
				Standard Deviation	0.483045892		0.075377836			
738		27.8	-128.9	13		3.4	0.5	X		
			231.1			2.8	0.5			
						2	0.4			
						2.3	0.5			
						3.8	0.5			
						2.8	0.4			
						2.3	0.4			
						3	0.4			
						3.2	0.4			
						3.2	0.5			
						3.8	0.5			
						1.6	0.4			
				Average	2.85		0.45			
				Standard Deviation	0.692163932		0.052223297			
739		26.9	-124.4	22.8		2.3	0.5	X		
			235.6			1.5	0.1			
						3.1	0.4			
						2.9	0.5			
						2.4	0.4			

						2.7	0.4			
						2.4	0.4			
						3.1	0.6			
						3.1	0.5			
						3.2	0.3			
						2.7	0.5			
						4.1	0.3			
					Average	2.791666667	0.408333333			
					Standard Deviation	0.633113997	0.131137217			
740		24.8	-121.4	20		3.8	0.8	X		
			238.6			3.6	0.6			
						2.2	0.5			
						3.8	0.6			
						2.9	0.4			
						4.4	0.5			
						2.7	0.4			
						4.5	0.6			
						4.3	0.5			
						5	0.5			
						4.2	0.7			
						3.8	0.6			
					Average	3.766666667	0.558333333			
					Standard Deviation	0.81501069	0.116450015			
741		20.0	-123.0	24.5		2.8	0.4	X		
			237.0			2.2	0.4			
						2.4	0.54			
						3.5	0.4			
						2.5	0.5			
						3.2	0.5			
						3.5	0.4			
						2.9	0.4			
						2.6	0.4			
						3.8	0.5			
						3.4	0.4			

						1.9	0.4			
					Average	2.891666667	0.436666667			
					Standard Deviation	0.593078767	0.055158175			
742		24.1	-127.8	20		3.7	0.3	X		
			232.2			3.2	0.4			
						1.7	0.4			
						3.4	0.4			
						2.6	0.4			
						3.8	0.5			
						2.7	0.5			
						3.2	0.6			
						1.8	0.3			
						3.4	0.5			
						3	0.5			
						4	0.5			
					Average	3.041666667	0.441666667			
					Standard Deviation	0.73169583	0.090033664			
743		15.8	-122.5	21.3		2.6	0.4	X		
			237.5			2.8	0.6			
						4	0.5			
						3.6	0.5			
						2.7	0.5			
						3.2	0.5			
						2.8	0.4			
						2.2	0.4			
						2.6	0.4			
						4.3	0.5			
						3.2	0.4			
						3.3	0.6			
					Average	3.108333333	0.475			
					Standard Deviation	0.618588324	0.075377836			
744		13.6	125.4			3	0.3	X		
			234.6	10		3.5	0.3			

						5	0.3			
						3.8	0.4			
						4.7	0.5			
						5.7	0.4			
						3.5	0.3			
						5.5	0.6			
						4.3	0.3			
						5.7	0.4			
						5.8	0.6			
						2.5	0.2			
					Average	4.416666667	0.383333333			
					Standard Deviation	1.150362262	0.126730446			
745		15.6	-128.9	18.1		3.5	0.5	X		
			231.1			3.3	0.4			
						2.8	0.4			
						3.2	0.5			
						2.4	0.4			
						2.8	0.5			
						2.4	0.3			
						2.2	0.4			
						2.6	0.6			
						3.8	0.5			
						3.1	0.5			
						1.9	0.4			
					Average	2.833333333	0.45			
					Standard Deviation	0.564613035	0.079772404			
746		10.1	-122.9	13.8		2.4	0.5	X		
			237.1			2.9	0.9			
						3.8	0.5			
						3	0.5			
						4	0.5			
						3.3	0.5			
						3.1	0.5			
						3	0.5			

						3.1	0.5			
						3.1	0.5			
						4	0.6			
						2.5	0.5			
					Average	3.183333333	0.541666667			
					Standard Deviation	0.520198097	0.116450015			
747		11.3	-128.8	17		2.1	0.5	X		
			231.2			4.6	0.5			
						3.8	0.5			
						3.3	0.4			
						1.9	0.6			
						2.3	0.6			
						3.2	0.5			
						2.7	0.4			
						2.7	0.5			
						2.3	0.5			
						3.8	0.7			
						4.9	0.6			
					Average	3.133333333	0.525			
					Standard Deviation	0.979177144	0.08660254			
748		17.3	-126.7	21.5		3	0.4	X		
			233.3			2.5	0.4			
						3	0.4			
						2	0.5			
						4.3	0.5			
						3.2	0.5			
						4.7	0.2			
						3.3	0.4			
						3.4	0.5			
						4.7	0.5			
						2.3	0.6			
						3.3	0.5			
					Average	3.308333333	0.45			
					Standard Deviation	0.876416602	0.1			

749		8.0	-128.4	14.5		1.6	0.4	X		
			231.6			0.6	0.4			
						1.1	0.4			
						1.5	0.4			
						1.5	0.5			
						1.9	0.5			
						2.5	0.5			
						3.5	0.5			
						2.5	0.3			
						0.6	0.3			
						1.6	0.5			
						1.4	0.4			
				Average	1.691666667	0.425				
				Standard Deviation	1.140591288	0.075377836				
750		3.7	-129.9	23.8		3.2	0.5	X		
			230.1			3.8	0.5			
						3.5	0.4			
						3.4	0.5			
						3.4	0.4			
						3	0.4			
						0.7	0.3			
						1.5	0.3			
						2	0.5			
						3.8	0.5			
						3.4	0.4			
						2.8	0.5			
				Average	2.875	0.433333333				
				Standard Deviation	0.974329606	0.077849894				
751		3.4	-127.0	11.5		2.9	0.4	X		
			233.0			1.7	0.4			
						1.6	0.4			
						1.6	0.4			
						3.2	0.4			

						2.5	0.4			
						2.5	0.4			
						3.3	0.3			
						3.2	0.3			
						1.5	0.4			
						2.4	0.4			
						0.4	0.3			
					Average	2.233333333	0.375			
					Standard Deviation	0.884547479	0.045226702			
752		2.1	-123.2	20.4		2.8	0.5	X		
						4.2	0.5			
						3.8	0.4			
						4	0.5			
						3.7	0.6			
						3.6	0.6			
						2.4	0.4			
						1.9	0.3			
						2.4	0.4			
						2.4	0.4			
						2.5	0.5			
						1	0.4			
					Average	2.891666667	0.458333333			
					Standard Deviation	0.970902423	0.090033664			
753		8.3	-120.3	11.9		3.6	0.6	X		
			239.7			2.7	0.6			
						2.2	0.3			
						1.7	0.4			
						4	0.5			
						2.9	0.6			
						3.7	0.5			
						3.5	0.7			
						5.4	0.8			
						5.4	0.6			
						4.4	0.73			

					3.2	0.4			
				Average	3.558333333	0.560833333			
				Standard Deviation	1.140540807	0.1472449			
754	4.5	-120.0	13.2		1.3	0.4	X		
		240.0			2.3	0.5			
					5.1	0.5			
					2.7	0.4			
					2.6	0.4			
					2.8	0.3			
					1.3	0.3			
					1.9	0.3			
					2.8	0.3			
					3.3	0.5			
					1	0.4			
					3	0.3			
				Average	2.508333333	0.383333333			
				Standard Deviation	1.104090192	0.083484711			
755	1.8	-117.4	20.6		4.3	0.6	X		
		242.6			5.6	0.8			
					6	0.9			
					5.2	0.7			
					6.4	0.5			
					5.4	0.7			
					6	0.9			
					6.2	0.9			
					3.9	0.7			
					4.7	0.5			
					5.4	0.8			
					4.9	0.8			
				Average	5.333333333	0.733333333			
				Standard Deviation	0.773813853	0.143548113			
756	9.4	-118.5	11.6		3.2	0.5	X		
		242.5			3.6	0.6			

						4.6	0.4			
						4.7	0.6			
						5.1	0.6			
						3.8	0.5			
						1.5	0.4			
						3.4	0.4			
						3.3	0.5			
						4	0.6			
						3.9	0.6			
						4.3	0.5			
					Average	3.783333333	0.516666667			
					Standard Deviation	0.931112075	0.083484711			
757		7.6	-118.7	16.1		2.4	0.5	X		
			241.3			3.9	0.5			
						3.8	0.5			
						3.9	0.4			
						3.4	0.6			
						3.5	0.6			
						4.1	0.5			
						4	0.6			
						2.7	0.6			
						4	0.5			
						3.8	0.5			
						2.4	0.4			
					Average	3.491666667	0.516666667			
					Standard Deviation	0.634548276	0.071774056			
758		3.8	-117.7	11.6		5.2	0.6	X		
			242.3			5.6	0.8			
						3.2	0.5			
						3.7	0.5			
						4.8	0.6			
						3.9	0.6			
						3.4	0.6			
						4.1	0.6			

						4.9	0.6			
						3.9	0.6			
						2.8	0.6			
						3.8	0.6			
					Average	4.108333333	0.6			
					Standard Deviation	0.847947611	0.073854895			
759		9.8	-110.7	21.9		3.4	0.5	X		
			248.3			3.6	0.6			
						4.6	0.5			
						2.8	0.5			
						3.2	0.4			
						4.2	0.5			
						4.7	0.7			
						4	0.5			
						3.8	0.5			
						4.1	0.5			
						3	0.4			
						3.7	0.4			
					Average	3.758333333	0.5			
					Standard Deviation	0.597659577	0.085280287			
760		5.7	-111.6	13.3		3.9	0.5	X		
			248.4			2.5	0.5			
						3.1	0.4			
						5.9	0.5			
						3.9	0.5			
						4.7	0.5			
						3.1	0.6			
						3.6	0.5			
						3.2	0.5			
						3.1	0.4			
						3.7	0.5			
						4.6	0.4			
					Average	3.775	0.483333333			
					Standard Deviation	0.926503692	0.057735027			

761	13.1	-112.2	16.6	3.9	0.5	X		
		247.8		3.8	0.5			
				3.3	0.3			
				2.6	0.3			
				3.7	0.5			
				3.5	0.4			
				4.6	0.6			
				3.9	0.4			
				3.4	0.4			
				3.3	0.4			
				3.3	0.3			
				4.3	0.5			
			Average	3.633333333	0.425			
			Standard Deviation	0.524548868	0.09653073			
762	12.0	-116.5	13.7	3.9	0.5	X		
		243.5		2.8	0.3			
				3.1	0.4			
				4.2	0.6			
				3.4	0.6			
				4	0.6			
				4.5	0.6			
				4.1	0.5			
				3.2	0.5			
				3.7	0.3			
				3.7	0.5			
				3.1	0.4			
			Average	3.641666667	0.483333333			
			Standard Deviation	0.523030215	0.111464086			
763	19.7	-116.9	17.5	4.7	0.3	X		
				4.1	0.3			
				4.3	0.3			
				6.1	0.5			
				4.6	0.5			

						3.3	0.3			
						4.3	0.3			
						4.2	0.4			
						4	0.3			
						4.7	0.3			
						4	0.4			
						2.9	0.5			
					Average	4.266666667	0.366666667			
					Standard Deviation	0.787785542	0.088762536			
764		16.0	-112.7	19.7		3.3	0.3	X		
			247.3			3.1	0.4			
						4.3	0.4			
						3.2	0.3			
						4	0.3			
						3.3	0.3			
						4.1	0.4			
						3	0.4			
						3.6	0.4			
						3.9	0.3			
						3.5	0.4			
						3.8	0.4			
					Average	3.591666667	0.358333333			
					Standard Deviation	0.425245027	0.051492865			
765		17.6	-118.8	13.2		3.7	0.5	X		
			241.2			3.6	0.5			
						2.8	0.4			
						3.6	0.4			
						4.2	0.4			
						4.2	0.6			
						3	0.4			
						2.5	0.4			
						3.7	0.5			
						3.7	0.6			
						3.5	0.4			

					3.4	0.5			
				Average	3.491666667	0.466666667			
				Standard Deviation	0.510718448	0.077849894			
766	11.0	-117.0	14.5		3.6	0.6	X		
		243.0			4.7	0.5			
					4.6	0.7			
					3.8	0.7			
					4	0.6			
					4.2	0.6			
					4.2	0.5			
					3	0.5			
					3.7	0.7			
					4.2	0.6			
					3.4	0.4			
					4.1	0.5			
				Average	3.958333333	0.575			
				Standard Deviation	0.487028715	0.09653073			
767	23.3	-114.4	11.5		3.6	0.4	X		
		245.6			3.6	0.5			
					3	0.3			
					2.6	0.7			
					3.2	0.6			
					2.8	0.6			
					2.9	0.5			
					4.7	0.7			
					4.1	0.4			
					3.6	0.7			
					3.7	0.5			
					2	0.3			
				Average	3.316666667	0.516666667			
				Standard Deviation	0.720900111	0.14668044			
768	27.0	-111.2	12.7		5.2	0.7	X		
		248.8			4.8	0.7			

						5.4	1.1			
						8.4	1			
						8	1			
						8	1.1			
						5.9	0.8			
						5	0.9			
						5.3	0.7			
						4.9	0.7			
						5	0.8			
						4.8	0.8			
					Average	5.891666667	0.858333333			
					Standard Deviation	1.388562588	0.156427929			
769		22.3	-113.0	13.3		3.2	0.3	X		
			247.0			4.6	0.6			
						4.4	0.6			
						2.5	0.5			
						2.1	0.3			
						2.7	0.4			
						3	0.5			
						3.2	0.4			
						3.6	0.4			
						4	0.6			
						3.5	0.5			
						3.1	0.5			
					Average	3.325	0.466666667			
					Standard Deviation	0.74483067	0.107308674			
770		22.4	-117.9	11.2		3.2	0.4	X		
			242.1			2.4	0.5			
						2.7	0.3			
						2.8	0.6			
						4.7	0.6			
						5.1	0.5			
						4.8	0.6			
						3.5	0.5			

						3	0.5			
						3.9	0.6			
						3.4	0.5			
						1.9	0.5			
					Average	3.45	0.508333333			
					Standard Deviation	1.003176772	0.090033664			
771		23.3	-118.2	11		3.7	0.4	X		
			241.8			4.7	0.5			
						3.6	0.5			
						4	0.5			
						2.9	0.4			
						2.1	0.5			
						2.1	0.6			
						1.5	0.2			
						2.6	0.4			
						2.9	0.6			
						4	0.6			
						3.9	0.5			
					Average	3.166666667	0.475			
					Standard Deviation	0.966091783	0.113818037			
772		28.4	-116.4	15.6		2.9	0.4	X		
			243.6			2.6	0.4			
						2.7	0.5			
						3.9	0.6			
						3	0.5			
						2.2	0.4			
						4.5	0.2			
						4	0.5			
						3.2	0.5			
						2.7	0.5			
						2.8	0.4			
						3.9	0.5			
					Average	3.2	0.45			
					Standard Deviation	0.704530792	0.1			

773		30.6	-113.7	11		3.6	0.5	X		
			246.3			3.1	0.4			
						3.7	0.4			
						4.7	0.9			
						3.5	0.6			
						2.7	0.5			
						2.1	0.6			
						2.3	0.4			
						4.2	0.5			
						3.9	0.6			
						4.7	0.6			
						3.4	0.5			
					Average	3.491666667	0.541666667			
					Standard Deviation	0.841490381	0.137895437			
774		34.4	-114.8	25.5		3.7	0.4	X		
			245.2			2.2	0.5			
						2.6	0.4			
						1.4	0.4			
						2.8	0.4			
						3	0.3			
						4	0.5			
						4.8	0.5			
						3.2	0.5			
						3.9	0.5			
						4.8	0.8			
						2.7	0.5			
					Average	3.258333333	0.475			
					Standard Deviation	1.022882143	0.121543109			
775		37.1	-112.5	14.1		2.8	0.5	X		
			247.5			2.1	0.4			
						2.8	0.4			
						4.8	0.7			
						3.6	0.3			

						4.9	0.6			
						2.9	0.5			
						4.3	0.5			
						2.9	0.5			
						2	0.6			
						4.2	0.9			
						3.1	0.5			
					Average	3.366666667	0.533333333			
					Standard Deviation	0.983808309	0.155699789			
776		33.0	-110.4	14		3.6	0.5	X		
			249.6			3.5	0.5			
						4.1	0.5			
						4.5	0.5			
						2.3	0.5			
						2.4	0.4			
						3.6	0.5			
						3.5	0.6			
						3.8	0.5			
						3.6	0.5			
						2.2	0.4			
						2.3	0.3			
					Average	3.283333333	0.475			
					Standard Deviation	0.780248601	0.075377836			
777		37.7	-118.2	16.7		2.4	0.8	X		
			241.8			2.8	0.4			
						2.8	0.5			
						3.5	0.5			
						3	0.5			
						4.1	0.5			
						5.5	0.5			
						4.6	0.3			
						2.7	0.6			
						2.6	0.6			
						2.5	0.5			

						1.8	0.5			
					Average	3.191666667	0.516666667			
					Standard Deviation	1.053529422	0.119341628			
778		32.6	-111.2	10.1		2.1	0.4	X		
			248.8			2.1	0.5			
						3.7	0.5			
						2.8	0.4			
						3.4	0.4			
						2.5	0.4			
						2.7	0.4			
						5.2	0.9			
						2.3	0.4			
						3.5	0.4			
						2.9	0.4			
						2.6	0.5			
					Average	2.983333333	0.466666667			
					Standard Deviation	0.873689495	0.143548113			
779		40.1	-115.0	14		1.6	0.5	X		
			245.0			2.9	0.4			
						2.8	0.5			
						7.9	1.1			
						2.6	0.5			
						5.7	0.6			
						5.5	0.9			
						3.5	0.4			
						1.9	0.3			
						1.8	0.3			
						4	0.6			
						2.8	0.4			
					Average	3.583333333	0.541666667			
					Standard Deviation	1.896807525	0.23915888			
780		43.3	-111.8	32		1.4	0.3	X		
			248.2			1.9	0.3			

						2.4	0.5			
						2.6	0.3			
						3.5	0.5			
						4	0.6			
						3.3	0.4			
						1.9	0.4			
						2	0.3			
						3.2	0.4			
						3.3	0.3			
						2.9	0.3			
					Average	2.7	0.383333333			
					Standard Deviation	0.79200551	0.10298573			
781		44.9	-116.8	13.1		3.7	0.3	X		
			243.2			2.3	0.4			
						1.9	0.3			
						1.7	0.5			
						3.2	0.4			
						2.9	0.2			
						3.5	0.3			
						1.1	0.3			
						1.4	0.2			
						3.6	0.3			
						0.6	0.2			
						2.2	0.6			
					Average	2.341666667	0.333333333			
					Standard Deviation	1.040505413	0.123091491			
782		45.4	-111.6	10		0	0.3	X		
			248.4			1.8	0.3			
						1.7	0.3			
						1.9	0.3			
						0.9	0.3			
						2	0.4			
						2.7	0.4			
						1.7	0.5			

						0.3	0.2			
						1.2	0.2			
						0.7	0.4			
						3	0.4			
					Average	1.491666667	0.333333333			
					Standard Deviation	0.907001387	0.088762536			
783		48.1	-114.4	11.5		0	0.3	X		
			245.6			1.4	0.3			
						3.6	0.4			
						4	0.5			
						4.7	1			
						3.6	0.4			
						4.5	0.7			
						1.4	0.2			
						1.2	0.7			
						1	0.2			
						1.8	0.2			
						0.6	0.1			
					Average	2.316666667	0.416666667			
					Standard Deviation	1.646391831	0.26571801			
784		42.5	-113.4	11.1		3.5	0.3	X		
						3	0.3			
						2.8	0.4			
						2.8	0.4			
						4.7	0.6			
						6.2	0.6			
						5.6	0.5			
						2.8	0.3			
						1	0.4			
						1.9	0.4			
						2.6	0.4			
						2	0.4			
					Average	3.241666667	0.416666667			
					Standard Deviation	1.53531657	0.10298573			

785	53.2	-111.3	32.3	1	0.1	X
		248.7		1	0.2	
				0.5	0.2	
				0.2	0.2	
				1	0.3	
				0.4	0.3	
				2.1	0.4	
				3.2	0.2	
				1	0.3	
				3.2	0.5	
				0.5	0.2	
				1	0.3	
			Average	1.258333333	0.266666667	
			Standard Deviation	1.026431004	0.107308674	
786	57.4	-110.6	34.8	1	0.3	X
		249.4		1.9	0.3	
				1.2	0.3	
				2	0.4	
				1.1	0.1	
				1.7	0.4	
				1.1	0.2	
				2.9	0.2	
				3.5	0.4	
				0.9	0.2	
				4.5	0.4	
				1.6	0.2	
			Average	1.95	0.283333333	
			Standard Deviation	1.128554989	0.10298573	
787	55.6	-117.8	32.4	1	0.1	X
		242.2		0.5	0.1	
				3.2	0.1	
				0.1	0.3	
				6.3	0.6	

						1.1	0.2			
						5.6	0.4			
						4.8	0.4			
						6.3	0.4			
						6.3	0.7			
						1.3	0.3			
						2	0.3			
					Average	3.208333333	0.325			
					Standard Deviation	2.492701467	0.191287504			
788		50.5	-115.5	30.1		0.4	0.2	X		
						0.1	0.1			
						0.1	0.2			
						1.6	0.1			
						1.6	0.2			
						4.8	0.4			
						6.3	0.4			
						2.9	0.5			
						2.6	0.4			
						1.9	0.5			
						2.7	0.4			
						0.1	0.1			
					Average	2.091666667	0.291666667			
					Standard Deviation	1.944903986	0.156427929			
789		57.0	-119.3	11.5		0.6	0.2	X		
			240.7			0	0.3			
						1.3	0.2			
						4.7	0.5			
						3.7	0.3			
						3	0.4			
						5.7	0.6			
						2	0.6			
						2.3	0.3			
						6	0.3			
						1.3	0.2			

						3.3	0.4			
					Average	2.825	0.358333333			
					Standard Deviation	1.940536477	0.144337567			
790		59.5	-112.8	15.5		0.4	0.2	X		
			247.2			1.6	0.2			
						2.9	0.3			
						5	0.4			
						8.2	0.7			
						5.3	0.4			
						3	0.3			
						4.8	0.3			
						1.4	0.2			
						2.4	0.2			
						2.9	0.3			
						5.8	0.6			
					Average	3.641666667	0.341666667			
					Standard Deviation	2.218295141	0.162135372			
791		70.0	-111.0	8.2		1.5	0.1	X		
			249.0			3.3	0.1			
						2.8	0.1			
						1.5	0.2			
						2.9	0.3			
						6.9	1.2			
						9.9	3.6			
						5.5	1.1			
						1.3	0.3			
						2.9	0.2			
						3.2	0.1			
						0.1	0.1			
					Average	3.483333333	0.616666667			
					Standard Deviation	2.734571043	1.016082793			
792		68.4	-114.5	15.7		0.7	0.1	X		
			245.5			1	0.1			

						4.3	0.9			
						1.3	0.2			
						2	0.2			
						1.8	0.2			
						4.6	0.5			
						2.7	0.3			
						1.8	0.2			
						3.9	0.3			
						3.6	0.3			
						0.6	0.2			
					Average	2.358333333	0.291666667			
					Standard Deviation	1.426667021	0.219330939			
793		60.8	-118.3	10.8		0.5	0.2	X		
			241.7			0.6	0.1			
						1.3	0.2			
						7.4	0.6			
						4.4	0.8			
						6.6	1.1			
						3.5	0.4			
						1.5	0.2			
						0.2	0.2			
						1.1	0.2			
						0	0.2			
						2.3	0.2			
					Average	2.45	0.366666667			
					Standard Deviation	2.504359835	0.308466392			
794		60.9	-110.4	10		4.4	0.4	X		
			249.5			2.3	0.3			
						2.1	0.2			
						3	0.4			
						1.7	0.2			
						4.2	0.4			
						3.4	0.4			
						2.1	0.2			

						2	0.2			
						4.1	0.4			
						6.5	0.6			
						4.8	0.3			
					Average	3.383333333	0.333333333			
					Standard Deviation	1.455293368	0.123091491			
795		65.9	-110.9	9.7		1.1	0.2	X		
			249.1			3	0.2			
						0.5	0.1			
						2	0.2			
						6.4	0.4			
						5.5	0.7			
						5.6	0.6			
						2.8	0.3			
						0.5	0.2			
						2.5	0.2			
						5.2	0.7			
						2.3	0.2			
					Average	3.116666667	0.333333333			
					Standard Deviation	2.070060752	0.214617348			
796		65.9	-108.4	16.5		4.1	0.3	X		
			251.6			1.4	0.2			
						4.6	0.2			
						4.6	0.2			
						3.1	0.2			
						3	0.4			
						5.8	0.6			
						0.1	0.1			
						3	0.3			
						5.1	0.4			
						10.2	1.2			
						5	0.5			
					Average	4.166666667	0.383333333			
					Standard Deviation	2.505750961	0.294906251			

797		62.0	-104.6	24		2.6	0.2	X		
			255.4			1.1	0.2			
						0.6	0.2			
						1.3	0.3			
						8.2	1.4			
						4.8	0.6			
						7.1	0.8			
						5.6	0.5			
						2.4	0.3			
						2.8	0.3			
						0	0.2			
						1.8	0.2			
					Average	3.19166667	0.43333333			
					Standard Deviation	2.640061409	0.360134655			
798		68.6	-106.6	21.2		0.8	0	X		
			253.4			2	0.1			
						2.2	0.2			
						7	0.6			
						5.8	0.4			
						5.1	0.4			
						3.7	0.2			
						4.1	0.2			
						0.8	0.1			
						1.8	0.2			
						0.7	0.1			
						0.5	0.1			
					Average	2.875	0.21666667			
					Standard Deviation	2.21692867	0.169669911			
799		64.9	-110.4	27.3		0.1	0.1	X		
			259.6			6.4	0.8			
						0.2	0.1			
						0.7	0.1			
						7.2	0.7			

						8.8	0.9			
						9	0.4			
						5.3	0.7			
						2.3	0.2			
						0.9	0.1			
						0.5	0.2			
						1.4	0.1			
					Average	3.566666667	0.366666667			
					Standard Deviation	3.510072088	0.317184584			
800		61.0	-102.1	21.5		2.1	0.4	X		
			251.1			0.4	0.1			
						2.3	0.1			
						1.6	0.2			
						2.7	0.5			
						0.9	0.2			
						5.9	0.7			
						1.6	0.2			
						3.8	0.3			
						7	1.1			
						1.5	0.1			
						0.8	0.2			
					Average	2.55	0.341666667			
					Standard Deviation	2.049168346	0.299873711			
801		63.1	-108.9	8.9		1.8	0.1	X		
						1.4	0.2			
						2.7	0.3			
						1.6	0.2			
						4.2	0.5			
						3.8	0.9			
						4.5	0.3			
						2.6	0.2			
						4	0.3			
						4.1	0.3			
						3.9	0.7			

					Average	3.8	0.3			
					Standard Deviation	3.2	0.358333333			
						1.116813649	0.231431644			
802	Ellison	55.1	-107.3	38.3		1.1	0.2	X		
			252.5			1.7	0.3			
						1.7	0.3			
						2.5	0.3			
						0.3	0.2			
						2.8	0.3			
						4.5	0.3			
						4.3	0.3			
						6.2	0.4			
						5.7	0.4			
						1.1	0.3			
						4	0.4			
					Average	2.991666667	0.308333333			
					Standard Deviation	1.922336804	0.066855792			
803		59.6	-106.5	10.5		0.9	0.2	X		
			253.5			0.7	0.3			
						0.5	0.1			
						1.8	0.2			
						1.1	0.1			
						3.3	0.2			
						1.4	0			
						2.4	0.1			
						3.5	0.5			
						0.3	0.2			
						0	0.2			
						0.8	0.2			
					Average	1.391666667	0.191666667			
					Standard Deviation	1.142133835	0.124011241			
804		51.0	-103.7	21.9		1.3	0.3	X		
			256.3			0.8	0.3			

						3	0.2			
						4	0.3			
						7	0.4			
						5.9	0.4			
						8	0.8			
						5.5	0.6			
						4.1	0.6			
						2.3	0.2			
						0.9	0.3			
						1.2	0.3			
					Average	3.66666667	0.39166667			
					Standard Deviation	2.493749763	0.183195541			
805		52.8	-101.8	8.5		1.3	0.3	X		
			258.2			3.9	0.3			
						2.6	0.3			
						3.6	0.3			
						2.2	0.3			
						5.9	0.5			
						5.6	0.7			
						2.2	0.5			
						1.9	0.2			
						2.7	0.3			
						2.9	0.4			
						2.1	0.3			
					Average	3.075	0.36666667			
					Standard Deviation	1.437248002	0.137068883			
806		57.8	-102.9	9.7		2.1	0.1	X		
			257.1			1.8	0.3			
						2.8	0.3			
						1.5	0.3			
						6.2	0.6			
						6	0.6			
						3.2	0.6			
						2.8	0.4			

						1.8	0.2			
						1.3	0.2			
						1.7	0.2			
						1.8	0.2			
					Average	2.75	0.333333333			
					Standard Deviation	1.66706056	0.177525073			
807		52.4	-105.5	9.6		1.5	0.3	X		
			254.5			0.2	0.5			
						2.9	0.3			
						4.9	0.5			
						3.3	0.3			
						2.4	0.3			
						0.9	0.2			
						2	0.9			
						0.6	0.3			
						2.5	0.3			
						1.5	0.2			
						2.7	0.2			
					Average	2.116666667	0.358333333			
					Standard Deviation	1.298833976	0.197522534			
808		48.8	-104.5	13.5		2.8	0.2	X		
			255.5			2.2	0.3			
						3	0.3			
						5.6	0.4			
						7.4	0.8			
						7.3	1			
						3.2	0.6			
						3.3	0.4			
						3.5	0.4			
						2.4	0.3			
						1.8	0.2			
						1.8	0.3			
					Average	3.691666667	0.433333333			
					Standard Deviation	1.981027435	0.246182982			

809		44.4	-104.8	16.2		1.5	0.4	X		
			255.2			1.5	0.3			
						1.8	0.3			
						3.2	0.3			
						4.5	0.5			
						6	0.6			
						1.6	0.3			
						2.9	0.4			
						3.9	0.4			
						1.7	0.4			
						5.3	0.5			
						2.8	0.3			
					Average	3.058333333	0.391666667			
					Standard Deviation	1.566384565	0.099620492			
810		43.2	-108.2	20		3.2	0.3	X		
			251.8			2.9	0.3			
						2.2	0.3			
						1.5	0.4			
						3.3	0.4			
						4.2	0.7			
						3.2	0.3			
						3.8	0.4			
						2.1	0.3			
						2	0.3			
						1.5	0.3			
						1.9	0.3			
					Average	2.65	0.358333333			
					Standard Deviation	0.90201794	0.116450015			
811		41.1	-105.2	16		2.5	0.3	X		
			254.8			0.1	0.2			
						1.5	0.3			
						2.5	0.3			
						3.9	0.5			

						3.6	0.6			
						4.3	0.7			
						2.3	0.3			
						3.2	0.2			
						1.6	0.3			
						0.8	0.2			
						0.4	0.2			
					Average	2.225	0.341666667			
					Standard Deviation	1.378487313	0.167648622			
812		43.1	-102.2	18		1.4	0.4	X		
			257.8			3	0.3			
						1.7	0.3			
						3.4	0.4			
						2.8	0.4			
						4.2	0.5			
						1.8	0.4			
						2.5	0.3			
						2.5	0.3			
						3.7	0.4			
						2.1	0.5			
						4.1	0.3			
					Average	2.766666667	0.375			
					Standard Deviation	0.938406128	0.075377836			
813		44.5	-107.6	25.5		3	0.2	X		
			252.4			2.1	0.2			
						2.6	0.2			
						3	0.2			
						2.2	0.2			
						1.3	0.1			
						3.1	0.2			
						1	0.3			
						1.5	0.2			
						1.1	0.3			
						2.6	0.2			

					1.8	0.2			
				Average	2.108333333	0.208333333			
				Standard Deviation	0.764506179	0.051492865			
814	35.5	-107.6	15.1		4.2	0.4	X		
		252.4			3.3	0.4			
					4.8	0.6			
					4.7	0.5			
					2.7	0.6			
					2.6	0.4			
					5.2	0.6			
					4.4	0.6			
					4.2	0.5			
					4.2	0.4			
					3.8	0.4			
					2.9	0.4			
				Average	3.916666667	0.483333333			
				Standard Deviation	0.86111274	0.093743687			
815	37.1	-107.5	22.5		3.4	0.3	X		
		252.5			3.7	0.3			
					2.8	0.5			
					4	0.5			
					4.6	0.8			
					5.8	0.8			
					3.3	0.5			
					2.8	0.5			
					3	0.5			
					2.5	0.5			
					3.2	0.4			
					2.2	0.3			
				Average	3.441666667	0.491666667			
				Standard Deviation	0.991287806	0.167648622			
816	31.9	-100.9	13.7		3.7	0.5	X		
		259.1			2.3	0.5			

						2	0.6			
						4.6	0.9			
						1.2	0.1			
						1	0.2			
						3.4	0.7			
						5.7	0.5			
						5.1	0.5			
						3.2	0.4			
						2.8	0.5			
						1.4	0.5			
					Average	3.033333333	0.491666667			
					Standard Deviation	1.545276282	0.206522433			
817		34.6	-100.2	20		2.8	0.4	X		
			259.8			3.1	0.3			
						1.3	0.3			
						1.3	0.3			
						2.6	0.3			
						1.2	0.5			
						2.4	0.4			
						3.3	0.5			
						3.5	0.4			
						3.4	0.4			
						2.5	0.4			
						1.3	0.6			
					Average	2.391666667	0.4			
					Standard Deviation	0.893876474	0.095346259			
818		31.1	-106.6	22.2		3.4	0.6	X		
			253.4			4	0.5			
						3.5	0.4			
						3.2	0.3			
						5.2	0.5			
						3.8	0.4			
						5.1	0.6			
						4.3	0.4			

						4.8	0.6			
						4.4	0.5			
						3.8	0.5			
						3.6	0.4			
					Average	4.091666667	0.475			
					Standard Deviation	0.669407246	0.09653073			
819		39.9	-105.3	28.3		5.9	0.5	X		
			255.7			3.6	0.4			
Collapsed South Rim ?						2.8	0.6			
						2.8	0.3			
						1.2	0.3			
						2.7	0.5			
						1.4	0.3			
						2.7	0.4			
						0.2	0.3			
						2.2	0.3			
						2.3	0.3			
						3	0.4			
					Average	2.566666667	0.383333333			
					Standard Deviation	1.399567033	0.10298573			
820		29.0	-108.9	18.1		3.1	0.6	X		
			251.1			2.8	0.5			
						4.5	0.6			
						4.9	0.6			
						5.1	0.7			
						4.9	0.5			
						3.5	0.3			
						4.2	0.4			
						4.6	0.5			
						4.3	0.4			
						3.2	0.6			
						3.7	0.6			
					Average	4.066666667	0.525			
					Standard Deviation	0.783156008	0.113818037			

821		28.9	-103.5	11.3		4.3	0.8	X		
			256.5			3.7	0.7			
						4.8	0.5			
						4.7	0.8			
						5.3	0.7			
						4.6	0.6			
						5.4	0.8			
						3.6	0.7			
						3.8	0.6			
						3.4	0.5			
						4.8	0.5			
						4.4	0.6			
				Average		4.4	0.65			
				Standard Deviation		0.657820091	0.116774842			
822		26.0	-107.2	12.5		3.8	0.5	X		
			253.8			5.1	0.6			
						5.3	0.9			
						4.3	0.6			
						3.6	0.5			
						5.8	1			
						4.6	0.5			
						4.5	0.6			
						4	0.4			
						3.5	0.5			
						5.5	0.4			
						4.5	0.4			
				Average		4.541666667	0.575			
				Standard Deviation		0.75493327	0.191287504			
823		22.0	-108.6	17.5		5.6	0.6	X		
			251.4			4.6	0.6			
						4.3	0.6			
						4.2	0.7			
						4.5	0.6			

						4.9	0.7			
						4	0.6			
						5.8	0.6			
						4.9	0.7			
						4.7	0.4			
						4.7	0.3			
						2.9	0.6			
					Average	4.591666667	0.583333333			
					Standard Deviation	0.747673158	0.119341628			
824		25.7	-107.5	17.5		3.8	0.5	X		
			252.5			3.3	0.4			
						6.2	0.8			
						6	0.7			
						5.8	0.7			
						4.6	0.4			
						6	0.6			
						1.7	0.5			
						5.2	0.6			
						2.5	0.6			
						3.5	0.4			
						3	0.6			
					Average	4.3	0.566666667			
					Standard Deviation	1.54095602	0.130267789			
825		23.4	99.9	11.4		4.4	0.5	X		
			260.1			5.1	0.6			
						4.6	0.6			
						5.4	0.4			
						4.9	0.7			
						4.3	0.7			
						1.3	0.5			
						3.7	0.6			
						5	0.3			
						4.7	0.5			
						4.1	0.5			

					Average	4.1	0.5			
						4.3	0.533333333			
					Standard Deviation	1.061731005	0.115470054			
826		20.5	101.9	15.1		4	0.5	X		
			258.1			4.4	0.4			
						4.9	0.5			
						3.6	0.6			
						3.1	0.5			
						3.9	0.5			
						2.9	0.6			
						4.1	0.5			
						5.3	0.7			
						4.1	0.4			
						3.8	0.6			
						4.3	0.4			
					Average	4.033333333	0.516666667			
					Standard Deviation	0.673300329	0.093743687			
827		15.1	100.2	19.1		4.7	0.6	X		
			259.8			2.9	0.5			
						3.2	0.5			
						1.7	0.3			
						5.7	0.6			
						5.5	0.6			
						4.6	0.6			
						3.2	0.5			
						4.1	0.6			
						3.1	0.5			
						1.4	0.4			
						2.4	0.4			
					Average	3.541666667	0.508333333			
					Standard Deviation	1.394442432	0.099620492			
828		19.5	-103.7	12.8		2.5	0.6	X		
			256.3			4	0.4			

						4.6	0.6			
						5.4	0.6			
						3.7	0.7			
						4.1	0.6			
						4.4	0.6			
						3.9	0.6			
						3.6	0.7			
						3.2	0.5			
						4	0.4			
						3.5	0.6			
					Average	3.908333333	0.575			
					Standard Deviation	0.725457014	0.09653073			
829		15.4	-108.9	13		4.3	0.3	X		
			251.1			5.8	0.4			
						5.7	0.3			
						6.6	0.6			
						5.7	0.4			
						6.3	0.2			
						4.7	0.2			
						4.2	0.3			
						4.8	0.2			
						5.3	0.3			
						5.2	0.2			
						4.6	0.1			
					Average	5.266666667	0.291666667			
					Standard Deviation	0.772638141	0.131137217			
830		12.1	-108.5	39.6		3.7	0.7	X		
			251.5			4.3	0.5			
						3.8	0.5			
						4.2	0.5			
						4.1	0.5			
						4.1	0.6			
						3.9	0.5			
						4.7	0.5			

						4.7	0.5			
						4.4	0.4			
						3.5	0.4			
						4.9	0.5			
					Average	4.19166667	0.50833333			
					Standard Deviation	0.431610795	0.079296146			
831		16.0	-103.6	10		4.3	0.5	X		
			256.4			5.4	0.6			
						4.6	0.5			
						4.4	0.5			
						4.8	0.6			
						5.3	0.8			
						4.9	0.7			
						4.4	0.5			
						3.3	0.5			
						3.8	0.5			
						3.9	0.4			
						5	0.5			
					Average	4.50833333	0.55			
					Standard Deviation	0.625893301	0.108711461			
832		6.6	-104.2	11.4		3.4	0.5	X		
			255.8			4.4	0.7			
						2.9	0.4			
						3.4	0.6			
						5.1	0.6			
						3.8	0.6			
						3.7	0.5			
						4.7	0.6			
						4.1	0.6			
						4	0.7			
						3.7	0.6			
						4.8	0.5			
					Average	4	0.575			
					Standard Deviation	0.650873539	0.08660254			

833	3.3	-101.5	21.1	5	0.4	X	
		258.5		4.8	0.4		
				5	0.4		
				5.7	0.9		
				4.7	0.5		
				4.9	0.5		
				3.9	0.6		
				3.8	0.6		
				4.3	0.5		
				4.9	0.5		
				4.8	0.6		
				4.6	0.4		
			Average	4.7	0.525		
			Standard Deviation	0.513455318	0.142222617		
834	9.8	-103.0	15.5	4	0.7	X	
		257.0		4.3	0.6		
				5	0.5		
				4.2	0.6		
				3.8	0.6		
				4.9	0.6		
				4.2	0.5		
				5.3	0.8		
				4.1	0.7		
				4.1	0.6		
				4.8	0.6		
				4.8	0.5		
			Average	4.458333333	0.608333333		
			Standard Deviation	0.475697255	0.090033664		
835	2.8	-107.4	14.6	3.7	0.5	X	
		252.6		3.6	0.5		
				2.8	0.5		
				3.4	0.4		
				4.2	0.5		

						4	0.5			
						3.2	0.3			
						2.9	0.4			
						3.2	0.4			
						3	0.5			
						4	0.5			
						3.4	0.5			
					Average	3.45	0.458333333			
					Standard Deviation	0.458257569	0.066855792			
836		2.6	-104.6	13.6		3.6	0.6	X		
			255.4			4.2	0.5			
						3.9	0.4			
						4	0.4			
						4.7	0.4			
						5.1	0.4			
						4.2	0.5			
						3.6	0.5			
						4.4	0.4			
						4.3	0.5			
						3.1	0.3			
						4.2	0.4			
					Average	4.108333333	0.441666667			
					Standard Deviation	0.528218848	0.079296146			
837		6.2	-100.4	34		4.2	0.6	X		
			259.3			3.7	0.5			
						4	0.6			
						3.6	0.6			
						3.9	0.7			
						5	0.7			
						4.8	0.5			
						3.7	0.5			
						3.6	0.6			
						4.1	0.5			
						3.4	0.5			

						3.8	0.5			
					Average	3.983333333	0.566666667			
					Standard Deviation	0.485860686	0.077849894			
838		6.0	-98.6	18.8		4.2	0.6	X		
			261.4			4.5	0.6			
						4.2	0.5			
						5	0.7			
						4.5	0.6			
						5.4	0.6			
						3.9	0.6			
						3.3	0.5			
						3.2	0.6			
						3.2	0.4			
						4	0.6			
						4	0.6			
					Average	4.116666667	0.575			
					Standard Deviation	0.684680859	0.075377836			
839		7.9	-97.7	13.4		4.3	0.5	X		
			262.3			4.2	0.6			
						4.8	0.6			
						4.6	0.6			
						5.3	0.5			
						3.9	0.6			
						3.2	0.6			
						3.3	0.5			
						3.6	0.5			
						3.9	0.6			
						3.8	0.6			
						3.2	0.7			
					Average	4.008333333	0.575			
					Standard Deviation	0.633059151	0.062158156			
840		0.5	-95.9	13.2		4.1	0.6	X		
			264.1			3	0.6			

						4.2	0.5			
						3.3	0.6			
						5.1	0.6			
						5.6	0.8			
						5.1	0.6			
						3.1	0.6			
						3	0.5			
						2.8	0.6			
						3.4	0.7			
						4.1	0.7			
					Average	3.9	0.61666667			
					Standard Deviation	0.954415576	0.083484711			
841		10.4	-94.1	12.7		4.7	0.5	X		
			265.9			3.8	0.5			
						4.9	0.6			
						4.5	0.6			
						2.7	0.4			
						3.9	0.5			
						3.6	0.5			
						4.3	0.6			
						4.2	0.5			
						3.7	0.5			
						4.5	0.6			
						4.2	0.6			
					Average	4.083333333	0.533333333			
					Standard Deviation	0.593653302	0.065133895			
842		6.8	-90.5	7.7		5.5	0.6	X		
			269.5			4.9	0.6			
						5.7	0.6			
						5.3	0.7			
						3.5	0.3			
						5	0.5			
						5.4	0.8			
						4.8	0.6			

						6	0.6			
						4.9	0.5			
						5.5	0.6			
						4.6	0.7			
					Average	5.091666667	0.591666667			
					Standard Deviation	0.647313797	0.124011241			
843		8.5	-92.6	7		4.4	0.7	X		
			267.4			4.9	0.5			
						4.6	0.7			
						4.4	0.5			
						2.9	0.6			
						4.4	0.5			
						4.1	0.4			
						3.1	0.6			
						4.9	0.7			
						3.4	0.5			
						3.2	0.4			
						4.2	0.6			
					Average	4.041666667	0.558333333			
					Standard Deviation	0.707695792	0.108362467			
844		10.2	-90.9	12		5.5	0.6	X		
			269.1			5.8	0.6			
						6.6	0.6			
						4.6	0.5			
						4.5	0.7			
						5.1	0.6			
						5.5	0.6			
						5.6	0.8			
						5.7	0.7			
						5.8	0.7			
						5.5	0.6			
						6.3	0.6			
					Average	5.541666667	0.633333333			
					Standard Deviation	0.605217216	0.077849894			

845		12.0	-93.2	17.4		4.9	0.5	X		
			266.8			4.3	0.5			
						5	0.6			
						5.4	0.5			
						4.4	0.5			
						3.9	0.5			
						5.1	0.4			
						4.4	0.5			
						4.1	0.4			
						4.3	0.5			
						4.5	0.7			
						4.3	0.4			
					Average	4.55	0.5			
					Standard Deviation	0.448228838	0.085280287			
846		15.6	-96.2	7		9.1	1.3	X		
			263.8			9.2	1.4			
						12.3	2			
						13	2.1			
ghland region but has high Fe and Ti..)						12.7	2.2			
						12.3	1.8			
						11.5	2.3			
						12.1	1.8			
						11.3	1.7			
						11	1.7			
						11.2	1.8			
						9.9	1.4			
					Average	11.3	1.791666667			
					Standard Deviation	1.308712066	0.320392751			
847		14.9	-94.7	12		3.9	0.7	X		
			265.3			4.6	0.7			
						3.7	0.7			
						5.3	0.8			
						3.4	0.6			

						5.2	0.7			
						4.8	0.8			
						4.4	0.8			
						4.6	0.9			
						5	0.7			
						4.3	0.6			
						4.2	0.6			
					Average	4.45	0.716666667			
					Standard Deviation	0.588526666	0.093743687			
848		18.3	-94.8	19		2.8	0.5	X		
			265.2			1.6	0.5			
						3.4	0.5			
						3.3	0.5			
						5.1	0.6			
						4.5	0.7			
						4	0.5			
						3.9	0.6			
						2.4	0.3			
						2.1	0.5			
						2.7	0.3			
						3.1	0.5			
					Average	3.241666667	0.5			
					Standard Deviation	1.013058675	0.112815215			
849		18.5	-92.4	13.5		3.3	0.4	X		
			267.6			3.7	0.4			
						4.6	0.6			
						2.5	0.7			
						4.5	0.5			
						4.9	0.5			
						2.4	0.4			
						2.6	0.4			
						3	0.4			
						2.2	0.5			
						5.1	0.5			

						3	0.5			
					Average	3.483333333	0.483333333			
					Standard Deviation	1.045191008	0.093743687			
850		20.8	-96.9	24		4.7	0.7	X		
			263.1			4.7	0.5			
						5	0.5			
						4.6	0.6			
						5.1	0.5			
						4.3	0.5			
						3.6	0.4			
						4.6	0.5			
						4	0.4			
						5.5	0.6			
						5.4	0.6			
						4.2	0.5			
					Average	4.641666667	0.525			
					Standard Deviation	0.561585958	0.08660254			
851		22.2	-95.6	17.5		5.2	0.5	X		
			264.4			5.6	0.5			
						4.8	0.4			
						4.4	0.7			
						4.6	0.5			
						5.5	0.5			
						6.5	0.6			
						6.4	0.7			
						9.2	0.8			
						2.7	0.4			
						4.2	0.4			
						5.6	0.6			
					Average	5.391666667	0.55			
					Standard Deviation	1.581402331	0.131425748			
852		22.2	-93.3	14.1		3	0.5	X		
			266.7			4.1	0.5			

						3.6	0.4			
						2.7	0.5			
						4.1	0.4			
						3	0.4			
						4.3	0.5			
						3.5	0.4			
						4.1	0.4			
						1.6	0.4			
						3.6	0.4			
						3.8	0.5			
					Average	3.45	0.441666667			
					Standard Deviation	0.771657013	0.051492865			
853		23.6	-90.5	12.5		4.9	0.4	X		
			269.5			4.5	0.4			
						5.1	0.4			
						5.3	0.7			
						3.6	0.5			
						4.3	0.5			
						5.2	0.7			
						4.9	0.5			
						4.8	0.5			
						4.5	0.4			
						4.2	0.5			
						3.7	0.5			
					Average	4.583333333	0.5			
					Standard Deviation	0.555686853	0.104446594			
854		25.2	-93.4	15.3		3.3	0.4	X		
			266.6			3.3	0.4			
						3.9	0.5			
						2.4	0.4			
						4.9	0.4			
						3.3	0.5			
						3.9	0.6			
						3.8	0.5			

						4	0.7			
						3.7	0.5			
						1.3	0.3			
						3	0.4			
					Average	3.4	0.46666667			
					Standard Deviation	0.90252172	0.107308674			
855		29.5	-95.4	16.9		1.9	0.3	X		
			264.6			1.4	0.3			
						3.3	0.6			
						3.6	0.5			
						1.2	0.3			
						2.5	0.6			
						1.7	0.5			
						1.3	0.5			
						3.5	0.5			
						6.8	0.8			
						2.5	0.4			
						0.5	0.3			
					Average	2.51666667	0.46666667			
					Standard Deviation	1.66996643	0.155699789			
856		31.2	-96.3	12.4		5.1	0.8	X		
			263.7			4.9	0.7			
						3.7	0.5			
						4.3	0.6			
						4.8	0.7			
						7.1	0.7			
						2.1	0.5			
						4.8	0.8			
						5.5	0.6			
						4.3	0.8			
						4.3	0.8			
						2.3	0.6			
					Average	4.43333333	0.675			
					Standard Deviation	1.340510984	0.113818037			

857		33.5	-93.2	3.5		0.8	0.3	X		
			266.8			1.2	0.3			
						2.1	0.5			
						1.5	0.3			
						5.2	0.3			
						1.1	0.3			
						4.2	0.4			
						2.1	0.3			
						0.2	0.3			
						0.1	0.3			
						0.7	0.3			
						1.6	0.2			
					Average	1.733333333	0.316666667			
					Standard Deviation	1.539972452	0.071774056			
858		34.4	-97.1	14		4	0.2	X		
			262.9			1.9	0.2			
						1.1	0.3			
						1.3	0.3			
						2.4	0.3			
						3.4	0.4			
						4.1	0.5			
						2.6	0.3			
						2.3	0.3			
						4	0.2			
						0.9	0.3			
						3	0.3			
					Average	2.583333333	0.3			
					Standard Deviation	1.144817042	0.085280287			
859		31.1	-91.8	12.5		3.6	0.8	X		
			268.2			4.2	0.4			
						4.3	0.7			
						3.5	0.6			
						3.2	0.4			

						3.7	0.4			
						4.6	0.5			
						4.2	0.7			
						1.7	0.6			
						6	0.6			
						5	0.7			
						5.3	0.7			
					Average	4.108333333	0.591666667			
					Standard Deviation	1.108199468	0.137895437			
860		37.2	-91.1	15.5		3.5	0.4	X		
			268.9			3.6	0.5			
						2.9	0.4			
						3	0.4			
						4.3	0.6			
						4.1	0.7			
						4.7	0.5			
						1.7	0.7			
						3.8	0.4			
						3.1	0.4			
						1.9	0.3			
						3.2	0.4			
					Average	3.316666667	0.475			
					Standard Deviation	0.894257776	0.128805703			
861		39.0	-99.6	19.6		1.7	0.4	X		
			260.4			3.9	0.4			
						2.6	0.4			
						3.8	0.5			
						5.2	0.5			
						2.2	0.3			
						2.9	0.5			
						4.8	0.4			
						2.3	0.4			
						2.4	0.4			
						2.1	0.4			

						2	0.4			
					Average	2.991666667	0.416666667			
					Standard Deviation	1.155585907	0.057735027			
862		41.1	-93.0	10		2.8	0.4	X		
			267.0			2.7	0.4			
						2.2	0.3			
						4.1	0.3			
						0.5	0.3			
						0.8	0.3			
						2.5	0.5			
						1.3	0.4			
						2.3	0.4			
						2.6	0.4			
						2.2	0.2			
						2.8	0.4			
					Average	2.233333333	0.358333333			
					Standard Deviation	0.976387901	0.079296146			
863		43.8	-96.8	10.8		2.3	0.2	X		
			263.2			1.6	0.3			
		Oval shaped				2.7	0.5			
						1.1	0.5			
						8.3	0.6			
						6.5	0.7			
						5.2	0.7			
						3.1	0.4			
						3.6	0.5			
						2.3	0.3			
						1.9	0.4			
						1.7	0.3			
					Average	3.358333333	0.45			
					Standard Deviation	2.206378494	0.162368828			
864		45.7	-94.1	11.6		2.7	0.3	X		
			265.9			3.4	0.3			

						5.3	0.4			
						4.8	0.4			
						4.7	0.5			
						4.1	0.5			
						5.7	0.6			
						6.3	0.7			
						4.3	0.6			
						4.4	0.5			
						0.8	0.3			
						1.9	0.3			
					Average	4.033333333	0.45			
					Standard Deviation	1.593927872	0.138169856			
865		44.4	-91.1	12		3.8	0.3	X		
			268.9			2.7	0.3			
						3.9	0.4			
						5.9	0.5			
						5.3	0.4			
						5.1	0.3			
						3.4	0.4			
						1.3	0.4			
						3.8	0.3			
						3.2	0.4			
						4.2	0.6			
						3.9	0.5			
					Average	3.875	0.4			
					Standard Deviation	1.222608984	0.095346259			
866		49.9	-92.9	15.1		2.8	0.3	X		
			267.1			2.8	0.4			
						4.4	0.5			
						6.4	0.4			
						8.1	0.7			
						7.9	0.9			
						8.1	0.9			
						7.6	0.7			

						4.8	0.7			
						4.3	0.4			
						1.9	0.4			
						1.4	0.2			
					Average	5.041666667	0.541666667			
					Standard Deviation	2.51304174	0.231431644			
867		47.1	-99.9	10.5		3.4	0.4	X		
			260.1			2.8	0.3			
						3.1	0.3			
						3.8	0.5			
						2.8	0.2			
						3.6	0.5			
						11.8	0.8			
						7.7	0.8			
						2.6	0.5			
						2.2	0.3			
						2.8	0.3			
						3.1	0.3			
					Average	4.141666667	0.433333333			
					Standard Deviation	2.795925065	0.196946386			
868		52.6	-92.2	20.6		3	0.4	X		
			267.8			3.3	0.3			
						1.4	0.1			
						2.8	0.3			
						3.5	0.3			
						6.8	0.6			
						8.5	0.9			
						8	0.7			
						6.8	0.9			
						4.9	0.5			
						4.2	0.3			
						2.5	0.3			
					Average	4.641666667	0.466666667			
					Standard Deviation	2.336064419	0.257022579			

869	51.8	-99.3	13.5	2.5	0.3	X
		260.7		1.5	0.3	
				2.7	0.4	
				4.2	0.2	
				1.3	0.3	
				5.6	0.4	
				6	0.5	
				2.4	0.3	
				2.3	0.4	
				3.6	0.3	
				0.4	0.2	
				2.2	0.3	
			Average	2.89166667	0.325	
			Standard Deviation	1.682778186	0.08660254	
870	56.4	-97.2	23.3	1.5	0.2	X
		263.8		2.7	0.4	
				3.5	0.4	
				3.1	0.4	
				6.7	0.5	
				8.9	0.5	
				7.9	0.7	
				6.8	0.4	
				8	0.6	
				0.3	0.2	
				1.1	0.3	
				2.3	0.3	
			Average	4.4	0.408333333	
			Standard Deviation	3.051378228	0.150504203	
871	59.9	-98.2	16.5	0.1	0.2	X
		261.8		1.4	0.1	
				4	0.4	
				4.7	0.5	
				3.9	0.2	

						7	0.5			
						6.7	0.6			
						7.3	0.5			
						8.7	0.9			
						0.6	0.1			
						3.2	0.3			
						0.7	0.1			
					Average	4.025	0.36666667			
					Standard Deviation	2.936022356	0.246182982			
872		54.7	-90.6	11.8		2.3	0.2	X		
			269.4			2.2	0.3			
						1.4	0.2			
						3.4	0.2			
						4.2	0.4			
						5	0.4			
						8.3	1			
						6.5	0.5			
						8.9	0.9			
						7.8	0.7			
						4.3	0.2			
						4.5	0.3			
					Average	4.9	0.44166667			
					Standard Deviation	2.488153751	0.281096338			
873		59.4	-92.0	38.1		1.4	0.3	X		
			268.0			0.7	0.1			
						0.1	0.1			
						1.4	0.1			
						6.2	0.5			
						7.6	0.6			
						6.8	0.3			
						7.2	0.3			
						4.7	0.7			
						2.5	0.1			
						1.9	0.2			

						0.4	0.1			
					Average	3.408333333	0.283333333			
					Standard Deviation	2.882693921	0.212488859			
874		61.2	-94.1	12.3		1.8	0.1	X		
			266.9			2.5	0.2			
						4.1	0.3			
						3.3	0.3			
						3.1	0.3			
						3.6	0.2			
						0.8	0.2			
						4.2	0.1			
						3.4	0.3			
						3.2	0.3			
						0.3	0.1			
						1.5	0.2			
					Average	2.65	0.216666667			
					Standard Deviation	1.27600228	0.083484711			
875		64.8	-96.7	14.5		1.1	0.1	X		
			263.3			3.4	0.1			
						3	0.2			
						5.3	0.5			
						7.4	1			
						9.6	0.9			
						10.5	0.9			
						8.6	0.6			
						9.8	1.1			
						2.7	0.3			
						3.3	0.1			
						2.2	0.2			
					Average	5.575	0.5			
					Standard Deviation	3.398963746	0.38612292			
876		68.5	-91.6	14.7		0.5	0.1	X		
			268.4			1.1	0.1			

						1.2	0.2			
						4.1	0.2			
						5.1	0.3			
						10	1.6			
						7.7	0.7			
						4	0.2			
						2.4	0.2			
						1.6	0			
						1.8	0.1			
						7.2	0.7			
					Average	3.891666667	0.366666667			
					Standard Deviation	3.055087659	0.447890679			
877		68.0	-96.8	11.5		1.6	0.1	X		
			263.2			3.8	0.2			
						3.9	0.4			
						6.7	0.5			
						0.9	0			
						4.8	0.6			
						11.8	2.2			
						6.7	0.4			
						3.7	0.1			
						4.3	0.1			
						6.2	0.2			
						0.7	0.1			
					Average	4.591666667	0.408333333			
					Standard Deviation	3.06281461	0.594609625			
878		62.5	-90.5	11.7		2.4	0.3	X		
			269.5			5.7	0.3			
						4.9	0.6			
						8.7	0.7			
						6.4	0.3			
						6.5	0.6			
						5.3	0.5			
						2.8	0.2			

						4.9	0.3			
						4.8	0.3			
						7.8	0.7			
						3.1	0.2			
					Average	5.275	0.41666667			
					Standard Deviation	1.923124825	0.189896303			
879		64.1	-93.6	15		2	0.4	X		
			266.4			2.8	0.1			
						1.9	0.2			
						4.4	0.2			
						10.9	1			
						11.7	1.2			
						6.6	0.4			
						5.1	0.4			
						2.3	0.2			
						2.1	0.1			
						2.2	0.2			
						1.6	0.1			
					Average	4.46666667	0.375			
					Standard Deviation	3.538960642	0.359608373			
880		66.0	-89.0	21		3.5	0.3	X		
			271.0			1.4	0.2			
						2.2	0.2			
						3.4	0.4			
						5.5	0.7			
						5.6	0.5			
						8.4	1			
						13.7	1.9			
						13.1	1.9			
						2.7	0.4			
						0.1	0.7			
						1	0.1			
					Average	5.05	0.69166667			
					Standard Deviation	4.516132698	0.618588324			

881		69.5	-81.0	12		2.2	0.2	X		
			279.0			2.4	0.2			
						4	0.2			
						6.9	0.8			
						6.2	0.4			
						7.6	0.5			
						7.4	0.9			
						8.4	1.3			
						2.2	0.1			
						0.6	0.1			
						2.8	0.2			
						0.7	0.1			
					Average	4.283333333	0.416666667			
					Standard Deviation	2.845996657	0.388079967			
882		62.9	-83.8	16		3.7	0.1	X		
			276.8			3	0.1			
						3.4	0.1			
						3.7	0.2			
						6.2	0.2			
						5.3	0.4			
						6.3	0.3			
						4.8	0.2			
						5.9	0.3			
						2.8	0.2			
						3.4	0.1			
						3.3	0.1			
					Average	4.316666667	0.191666667			
					Standard Deviation	1.303724269	0.099620492			
883		66.1	-83.2	10.5		5.3	0.4	X		
			276.8			5.6	0.4			
						5.9	0.5			
						4.1	0.6			
						12.3	2.6			

						7.5	0.6			
						2.73	0.1			
						3.6	0.3			
						3.3	0.2			
						4.1	0.2			
						4.8	0.4			
						4.6	0.6			
					Average	5.319166667	0.575			
					Standard Deviation	2.547735031	0.65937298			
884		61.3	-86.4	13.7		1.5	0.2	X		
			273.6			0.9	0.1			
						2.8	0.1			
						9.3	0.5			
						9	0.5			
						9.8	0.7			
						19.2	3.4			
						12.1	0.9			
						7.8	1			
						9.8	1.5			
						4.3	0.2			
						1.5	0.2			
					Average	7.333333333	0.775			
					Standard Deviation	5.408466987	0.931396801			
885		61.4	-82.8	20.1		7.9	0.2	X		
			277.2			5.9	0.1			
						5.1	0.2			
						6.9	0.3			
						7.8	0.4			
						10	0.6			
						8.6	1.5			
						11.7	2			
						9.3	0.8			
						5.3	0.3			
						8.2	0.3			

						7.3	0.2			
					Average	7.833333333	0.575			
					Standard Deviation	1.937821332	0.591031456			
886		55.1	-88.5	14.7		1.5	0.3	X		
			271.5			2.8	0.2			
						1.1	0.1			
						3.4	0.2			
						2.7	0.3			
						13.2	2.5			
						7.5	0.6			
						7.2	0.3			
						7.7	0.6			
						8.6	0.9			
						3.6	0.3			
						2.4	0.2			
					Average	5.141666667	0.541666667			
					Standard Deviation	3.658230654	0.657071095			
887		58.7	-84.6	12.3		5.5	0.2	X		
			276.4			5.5	0.3			
						5.5	0.3			
						5.6	0.4			
						5.6	0.3			
						6.9	0.5			
						3.4	0.2			
						3.8	0.3			
						3.3	0.2			
						5.4	0.3			
						7.7	0.3			
						5.3	0.5			
					Average	5.291666667	0.316666667			
					Standard Deviation	1.296469565	0.10298573			
888		54.6	-82.8	8.8		1.7	0.1	X		
			277.2			2.5	0.2			

						3.1	0.3			
						5.1	0.4			
						9.8	0.5			
						10.5	0.9			
						10.1	1			
						6.8	0.5			
						6.4	0.3			
						5.9	0.4			
						2.1	0.2			
						1.3	0.2			
					Average	5.441666667	0.416666667			
					Standard Deviation	3.382161314	0.279067712			
889		51.7	-80.8	12.1		3.2	0.3	X		
			279.2			2.8	0.3			
						3	0.3			
						5.4	0.4			
						6.7	0.4			
						8.2	0.7			
						6.5	0.5			
						4.9	0.4			
						1.4	0.2			
						1.4	0.4			
						3.4	0.2			
						2.4	0.3			
					Average	4.108333333	0.366666667			
					Standard Deviation	2.201841516	0.137068883			
890		51.6	-84.4	21		2.5	0.2	X		
			275.6			5	0.4			
						3.1	0.2			
						3.1	0.4			
						5.4	0.3			
						6	0.4			
						5.7	0.3			
						6	0.4			

						3.7	0.4			
						2.6	0.2			
						0.8	0.2			
						2.8	0.2			
					Average	3.891666667	0.3			
					Standard Deviation	1.687094508	0.095346259			
891		53.5	-89.2	14.6		1.7	0.3	X		
			270.8			1.5	0.1			
						1.6	0.2			
						7.3	0.6			
						3.3	0.2			
						4.2	0.2			
						8.7	0.8			
						3.8	0.3			
						6.3	0.7			
						8.3	0.7			
						2.6	0.3			
						0.5	0.2			
					Average	4.15	0.383333333			
					Standard Deviation	2.837572586	0.244329633			
892		47.2	-83.7	10.9		0.4	0.4	X		
			276.3			1.7	0.3			
						2.6	0.4			
						2.9	0.4			
						3.8	0.4			
						3.1	0.5			
						4.3	0.5			
						1.4	0.3			
						4.5	0.6			
						1.4	0.2			
						2.8	0.4			
						2.1	0.3			
					Average	2.583333333	0.391666667			
					Standard Deviation	1.246692594	0.108362467			

893		45.0	-81.7	18.5		9.7	0.7	X		
			287.3			9.5	1			
						8.3	0			
						10.5	1.2			
						9.6	1.3			
						9.6	1			
						10.8	1.1			
						4.9	0.4			
						6.2	0.7			
						9.5	0.9			
						8.4	0.7			
						6.7	0.5			
					Average	8.641666667	0.791666667			
					Standard Deviation	1.82031882	0.370401093			
894		49.5	-88.2	14		6.1	0.7	X		
			271.2			0.9	0.2			
						1.5	0.2			
						2.9	0.2			
						3	0.3			
						7.2	0.6			
						6.3	0.9			
						6.1	1.1			
						4.6	0.8			
						4.6	0.4			
						3.8	0.3			
						1.1	0.2			
					Average	4.008333333	0.491666667			
					Standard Deviation	2.165623292	0.317542648			
895		44.2	-89.3	19.5		0.2	0.4	X		
			270.7			0.7	0.3			
						0.1	0.2			
						0.2	0.2			
						0.2	0.2			

						2.2	0.9			
						2.3	0.3			
						0.6	0.2			
						1	0.4			
						3.1	0.4			
						1	0.5			
						2.4	0.3			
					Average	1.16666667	0.35833333			
					Standard Deviation	1.05082939	0.19752253			
896		44.5	-86.3	11.5		3.7	0.4	X		
			273.7			1	0.4			
						6.8	0.9			
						7.6	0.8			
						5.3	0.7			
						8.8	0.9			
						5.5	0.4			
						3.8	0.5			
						6.8	0.6			
						4.9	0.4			
						3.7	0.4			
						1.7	0.3			
					Average	4.96666667	0.55833333			
					Standard Deviation	2.33017101	0.21514618			
897		40.9	-86.3	13.5		5.7	0.7	X		
			273.7			4.1	0.3			
						5.4	0.6			
						4	0.3			
						7.6	0.7			
						7.2	1.1			
						2.9	0.4			
						4.4	0.3			
						4.9	0.4			
						4.5	0.5			
						5	0.4			

						3.8	0.5			
					Average	4.958333333	0.516666667			
					Standard Deviation	1.365455857	0.232900031			
898		37.2	-85.2	18.5		3.3	0.5	X		
			274.8			3.6	0.5			
						4.2	0.6			
						5.2	0.5			
						5.4	0.5			
						3	0.5			
						5	0.4			
						2.1	0.5			
						3.8	0.4			
						4.1	0.3			
						4.1	0.6			
						2.1	0.3			
					Average	3.825	0.466666667			
					Standard Deviation	1.087219138	0.098473193			
899		35.1	-83.4	15		3.4	0.3	X		
			272.6			3.3	0.4			
						3.4	0.4			
						3.6	0.5			
						5	0.4			
						4.2	0.5			
						4.1	0.4			
						4.9	0.4			
						2.5	0.4			
						3.5	0.3			
						0.8	0.3			
						2.5	0.2			
					Average	3.433333333	0.375			
					Standard Deviation	1.142830086	0.08660254			
900		36.8	-81.4	16.7		7.6	0.6	X		
			278.6			6.7	0.8			

						8.3	0.6			
						9.2	1.2			
						8.1	1.2			
						8.7	0.6			
						6.5	0.8			
						5.6	0.8			
						4.7	0.8			
						7	0.6			
						7.7	0.9			
						7.8	0.7			
					Average	7.325	0.8			
					Standard Deviation	1.294832386	0.213200716			
901		39.6	-87.7	15.5		3.2	0.5	X		
			272.3			3.3	0.3			
						5.8	0.5			
						4.5	0.6			
						4.7	0.9			
						4.1	0.4			
						4.7	0.4			
						4.6	0.7			
						1.2	0.4			
						4.3	0.6			
						4.1	0.4			
						5.9	0.5			
					Average	4.2	0.516666667			
					Standard Deviation	1.244624807	0.164224532			
902		30.9	-98.0	25.7		2.9	0.4	X		
			271.0			4.2	0.5			
						7.3	0.9			
						4.2	0.6			
						4	0.6			
						5	0.5			
						5.1	0.7			
						3.2	0.5			

						4.1	0.6			
						3	0.4			
						3.1	0.4			
						4.6	0.4			
					Average	4.225	0.541666667			
					Standard Deviation	1.228543114	0.150504203			
903		31.9	83.0	7		6.2	0.8	X		
			277.0			8.1	0.8			
						6.3	0.8			
						6.2	0.7			
						7.7	0.8			
						6	0.5			
						6.6	0.3			
						5.7	0.6			
						5.9	0.8			
						5.1	0.6			
						6.1	1			
						7.3	0.8			
					Average	6.433333333	0.708333333			
					Standard Deviation	0.862694862	0.183195541			
904		28.2	-84.6	12.9		7.6	0.8	X		
			275.4			4.5	0.7			
						7	1.1			
						5.2	0.9			
						4.7	0.9			
						6	1			
						3.9	0.7			
						6.8	1			
						7.3	1.2			
						6.7	0.9			
						4.8	0.9			
						5.9	0.8			
					Average	5.866666667	0.908333333			
					Standard Deviation	1.228697265	0.150504203			

905	27.4	-86.7	11.7	3.9	0.5	X	
		273.3		3.9	0.4		
				5.1	0.7		
				5	0.6		
				4.2	0.3		
				4.5	0.6		
				4.6	0.5		
				4.7	0.7		
				4.6	0.3		
				4.4	0.5		
				5.6	0.6		
				1.2	0.4		
			Average	4.308333333	0.508333333		
			Standard Deviation	1.093333795	0.137895437		
906	25.8	-89.2	16.7	3.6	0.4	X	
		270.8		4.5	0.7		
				3.2	0.4		
				3.9	0.3		
				4.3	0.4		
				5.2	0.6		
				4.7	0.5		
				4	0.7		
				3.8	0.4		
				3.8	0.5		
				3.7	0.4		
				3.2	0.5		
			Average	3.991666667	0.483333333		
			Standard Deviation	0.594609625	0.126730446		
907	23.5	-85.7	17.1	6.1	0.8	X	
		274.3		7.1	0.5		
				6.2	0.8		
				6.6	0.7		
				5	0.7		

						5.4	0.8			
						6.1	0.6			
						5	0.5			
						7	0.7			
						0.7	0.7			
						5.8	0.7			
						5.5	0.7			
					Average	5.541666667	0.683333333			
					Standard Deviation	1.674655098	0.10298573			
908		20.1	-87.2	13.2		4.4	0.5	X		
			272.8			4.1	0.6			
						5.4	0.6			
						5.2	0.6			
						3.5	0.4			
						4	0.5			
						3.3	0.5			
						3.7	0.5			
						4.7	0.6			
						4.6	0.4			
						4.8	0.5			
						3.9	0.5			
					Average	4.3	0.516666667			
					Standard Deviation	0.661953033	0.071774056			
909		22.3	-88.1	17.5		3.5	0.5	X		
			271.9			4.2	0.4			
						4.7	0.5			
						3.7	0.4			
						3.3	0.4			
						3.9	0.4			
						0.5	0.6			
						5.5	0.7			
						7.2	0.6			
						6.6	0.7			
						4.3	0.5			

						8.6	0.4			
					Average	4.666666667	0.508333333			
					Standard Deviation	2.105979942	0.116450015			
910		18.9	-88.7	15.3		4.6	0.6	X		
			271.3			3.4	0.4			
						2.7	0.4			
						3.3	0.5			
						4.7	0.6			
						4.5	0.6			
						5	0.8			
						5.5	0.6			
						3.4	0.4			
						3.5	0.6			
						2.9	0.5			
						2.1	0.3			
					Average	3.8	0.525			
					Standard Deviation	1.037479463	0.135680105			
911		15.5	-87.3	12		3.5	0.4	X		
			272.7			3.5	0.6			
						3.2	0.5			
						2.5	0.4			
						2.9	0.6			
						3.7	0.5			
						2.7	0.5			
						2.9	0.6			
						2.3	0.5			
						3.4	0.4			
						4.6	0.5			
						3.2	0.4			
					Average	3.2	0.491666667			
					Standard Deviation	0.614964892	0.079296146			
912		14.0	-81.6	13.2		5.6	0.8	X		
			278.4			5.3	0.8			

						4.9	0.6			
						6.6	0.7			
						6.9	1			
						6.5	0.6			
						5.2	0.9			
						4.7	0.6			
						6.2	0.7			
						3.7	0.9			
						5.2	0.7			
						5.3	1			
					Average	5.508333333	0.775			
					Standard Deviation	0.912995403	0.148477118			
913		17.4	-81.7	45		6.2	0.8	X		
			278.3			5.5	0.6			
						6.3	0.7			
						6.6	0.7			
						6.6	0.7			
						5.9	0.7			
						3.5	0.6			
						1.8	0.3			
						4	0.7			
						5.5	0.6			
						4.7	0.7			
						6.9	0.6			
					Average	5.291666667	0.641666667			
					Standard Deviation	1.529383912	0.124011241			
914		11.9	-88.1	17.8		5.1	0.6	X		
			271.9			3.2	0.5			
						3.7	0.6			
						3.8	0.3			
						4.9	0.6			
						5.1	0.6			
						6.5	0.8			
						5.8	0.8			

						6.3	0.8			
						4.8	0.6			
						5.8	0.8			
						4.3	0.5			
					Average	4.941666667	0.625			
					Standard Deviation	1.049206049	0.154478595			
915		10.3	-87.0	20		4.7	0.7	X		
			273.0			6	0.9			
						5.1	0.7			
						5	0.5			
						4	0.6			
						5.2	0.6			
						4.5	0.6			
						4.4	0.6			
						3.2	0.8			
						5.9	0.8			
						5.4	0.7			
						4.6	0.7			
					Average	4.833333333	0.683333333			
					Standard Deviation	0.785474186	0.111464086			
916		8.4	-87.4	9.6		3.3	0.7	X		
			272.6			3.6	0.7			
						4	0.5			
						3.6	0.7			
						3.2	0.5			
						4.6	0.6			
						5	0.7			
						5.1	0.6			
						4.3	0.7			
						4.7	0.6			
						1.9	0.5			
						1.8	0.4			
					Average	3.758333333	0.6			
					Standard Deviation	1.093333795	0.104446594			

917		4.4	-84.4	10.5		3.7	0.8	X		
			275.6			4.9	0.7			
						2.6	0.7			
						2.3	0.6			
						2.6	0.6			
						4.3	0.6			
						3.4	0.6			
						3	0.4			
						3.6	0.6			
						4.2	0.7			
						4.6	0.7			
						3.7	0.7			
				Average		3.575	0.641666667			
				Standard Deviation		0.83353028	0.099620492			
918		1.1	-88.0	12.1		4.9	0.6	X		
						4	0.6			
						3.5	0.6			
						3.3	0.6			
						2.5	0.5			
						5.1	0.7			
						6.2	0.7			
						3.7	0.6			
						4.8	0.4			
						2.2	0.5			
						3.3	0.4			
						4.1	0.8			
				Average		3.966666667	0.583333333			
				Standard Deviation		1.140441169	0.119341628			
919		0.1	-84.8	19		3.9	0.5	X		
			275.2			3.4	0.5			
						3.1	0.6			
						1.6	0.6			
						4.2	0.4			

						2.4	0.5			
						2.2	0.5			
						1.9	0.6			
						3.8	0.4			
						3.2	0.5			
						2.3	0.3			
						4.3	0.3			
					Average	3.025	0.475			
					Standard Deviation	0.926503692	0.105528971			
920		5.3	-81.3	18.7		5.8	0.5	X		
			278.3			5.5	0.9			
						5.7	0.7			
						5.4	0.6			
						5.4	1			
						4.4	0.8			
						4.8	0.8			
						6.5	0.7			
						6.5	1			
						6	0.8			
						5.5	0.7			
						5.7	0.5			
					Average	5.6	0.75			
					Standard Deviation	0.604528366	0.167874412			
921		9.4	-85.0	24.3		4.2	0.7	X		
			275.0			3.4	0.4			
						3.6	0.6			
						6.2	0.7			
						4.5	0.6			
						4.4	0.9			
						4.3	0.7			
						5.2	0.7			
						4.8	0.9			
						4.5	0.6			
						4.4	0.6			

						4.3	0.7			
					Average	4.483333333	0.675			
					Standard Deviation	0.718373584	0.135680105			
922		1.1	-74.2	16.1		4.2	0.4	X		
			285.3			3.1	0.4			
						4.3	0.4			
						3.6	0.4			
						3.4	0.5			
						4.8	0.6			
						3.9	0.4			
						3.7	0.4			
						3.5	0.4			
						2.4	0.4			
						3.4	0.4			
						2.3	0.4			
					Average	3.55	0.425			
					Standard Deviation	0.728010989	0.062158156			
923		4.0	-74.2	15.1		4	0.6	X		
			285.8			4.7	0.6			
						4.5	0.4			
						4.5	0.6			
						6	0.6			
						4.8	0.6			
						3.7	0.7			
						5.2	0.6			
						4.1	0.4			
						4.5	0.4			
						3.6	0.5			
						5.2	0.6			
					Average	4.566666667	0.55			
					Standard Deviation	0.685344417	0.1			
924		6.8	-73.9	18		5.7	0.7		X	
			286.1			5.6	0.7			

						6.6	0.9			
						6.5	0.8			
						6.2	0.6			
						7.6	0.8			
						6.9	0.6			
						6.3	0.6			
						4.9	0.6			
						4.6	0.4			
						6.1	0.7			
						5.6	0.6			
					Average	6.05	0.66666667			
					Standard Deviation	0.835028579	0.130267789			
925		5.1	-71.1	10.9		4.6	0.4	X		
			288.9			6.6	0.6			
						6.3	0.6			
						7.5	0.4			
						7.1	0.5			
						7	0.6			
						6.8	0.6			
						7.1	0.6			
						4.9	0.6			
						4.6	0.5			
						4.8	0.6			
						4.3	0.5			
					Average	5.96666667	0.54166667			
					Standard Deviation	1.21380943	0.079296146			
926		9.0	-79.5	22.1		7.1	0.6	X		
			280.5			6.4	0.6			
						5.3	0.6			
						6.7	0.3			
						6.1	0.8			
						5.4	0.8			
						5.2	0.6			
						7	0.7			

						5.3	0.6			
						6.3	0.6			
						6.3	0.6			
						5.7	0.6			
					Average	6.066666667	0.616666667			
					Standard Deviation	0.678679645	0.126730446			
927		0.6	-72.8	13		4.9	0.5	X		
			287.2			3.2	0.5			
						4.5	0.4			
						5.4	0.5			
						3.9	0.5			
						4.7	0.4			
						5.8	0.6			
						3.9	0.5			
						3.9	0.5			
						5.5	0.3			
						3.6	0.3			
						3.9	0.5			
					Average	4.433333333	0.458333333			
					Standard Deviation	0.830479963	0.090033664			
928		15.1	-73.1	11		14.4	4	X		
			286.9			14.5	3.4			
						15.4	3.8			
						15.5	4.2			
		Oceanus Procellarum				15.2	4.2			
						14.8	3.9			
						14.6	3.4			
						12.2	2			
						13.9	3.4			
						14	3.5			
						13.9	3.5			
						13.9	3			
					Average	14.35833333	3.525			
					Standard Deviation	0.893876474	0.603211104			

929		17.6	-75.2	11		16.7	4.9		X	
			284.8			16.4	4.8			
						16.4	4.3			
						15.7	3.5			
						15.1	3.2			
						15.5	3.9			
						14.9	4			
						15.6	3.1			
						15.8	4.2			
						16.2	4.5			
						16.6	4.3			
						14.7	3.2			
					Average	15.8	3.991666667			
					Standard Deviation	0.672850112	0.622981589			
930		15.9	71.5	9		17.8	7.9		X	
			288.5			17.9	7.6			
						18.2	7.7			
						17.9	6			
						18	6.6			
						17.3	6.5			
						16.7	3.8			
						16.1	3.1			
						16.5	6.3			
						16.7	2.8			
						16.5	2.9			
						17.7	7.4			
					Average	17.275	5.716666667			
					Standard Deviation	0.730037359	1.996739767			
931		17.8	-75.3	12		16.8	5.4		X	
			284.7			16.5	4.2			
						16	4.3			
						15	3.8			
						16	3.7			

						15.3	3.4			
						14.6	3.6			
						15.8	4.1			
						16	3.8			
						16.5	4.8			
						16.3	4.5			
						14.6	3.1			
					Average	15.78333333	4.058333333			
					Standard Deviation	0.745694714	0.635979321			
932		17.0	-77.5	16.1		10.4	1.2	X	X	
			282.5			10.1	1			
						11	1.1			
						10.7	1.3			
						9.4	1.1			
						7.7	0.5			
						13.7	1.4			
						10.8	1.3			
						11.7	1.7			
						9.8	1.4			
						7.5	1.1			
						9.7	1.3			
					Average	10.20833333	1.2			
					Standard Deviation	1.662122593	0.289199522			
933		12.7	-79.7	23.7		5.5	0.9	X	X	
			280.3			7.3	0.9			
						6.4	1.2			
						6.7	0.8			
						5.1	0.7			
						5.6	0.8			
						4.8	0.7			
						4.9	0.6			
						7.9	0.9			
						5.7	1			
						6.1	1.1			

						5.4	0.9			
					Average	5.95	0.875			
					Standard Deviation	0.965307299	0.171225529			
934		11.4	-73.6	12.5		13.1	2.4		X	
			286.1			13.3	2.8			
						12	2.1			
						9.9	1.5			
						11.4	1.7			
						13	2.4			
						12.5	2.6			
						12.8	2.4			
						10.4	1.9			
						14.3	2.7			
						12.1	1.8			
						11.4	2.8			
					Average	12.18333333	2.258333333			
					Standard Deviation	1.256859964	0.448144322			
935		22.5	-73.9	10.5		10.9	1.8		X	
			286.9			10.1	1.6			
						10.6	1.7			
						6.1	1.2			
						9.2	1.9			
						9.3	1.6			
						8.1	1.4			
						8.3	1			
						9	1.3			
						7	0.9			
						9.7	1.5			
						10.6	1.5			
					Average	9.075	1.45			
					Standard Deviation	1.483316309	0.306000594			
936		20.7	-75.8	15.4		15.9	3.6		X	
			284.2			16.1	3.9			

						14	1.5			
						15.2	2.3			
						15.2	3.2			
						14.7	2.3			
						14.5	1.9			
						16.2	3.5			
						16.1	4.4			
						16.4	4.5			
						15.7	3.5			
						15.9	4.1			
					Average	15.49166667	3.225			
					Standard Deviation	0.765694377	0.998293999			
937		21.0	-71.8	11		17.4	5.4		X	
			289.2			16.7	5.3			
						16.1	4.4			
						17	4.9			
						17.3	5			
						16.9	4.2			
						17.3	5.5			
						17.2	4.9			
						17.3	5.4			
						17.5	5.2			
						17.5	5.4			
						14.7	5.4			
					Average	16.90833333	5.083333333			
					Standard Deviation	0.801655484	0.421756788			
938		23.3	-74.9	13.5		11.7	1.6		X	
			285.9			11.3	1.5			
						11	1.8			
						9.2	1.7			
						11	2			
						12.8	1.8			
						10.4	2			
						8	1.1			

						11.5	2.3			
						12.5	2.4			
						12.8	2.1			
						11.5	1.7			
					Average	11.14166667	1.833333333			
					Standard Deviation	1.419640373	0.357601437			
939		28.2	-77.0	11		13.2	2.5		X	
			283.0			10	1.4			
						9.2	1.4			
						10.4	1.5			
						11.6	1.9			
						12.2	1.9			
						11	2			
						12.6	2.3			
						12.4	2.3			
						11	1.5			
						9.9	1.3			
						9.9	1			
					Average	11.11666667	1.75			
					Standard Deviation	1.279796385	0.468071479			
940	Briggs "B"	28.1	-70.6	25		14.6	3.2		X	
			289.4			15.2	3.4			
						12.6	2.2			
						12.2	2			
						12.7	2.5			
						13.1	2.8			
						13.5	2.3			
						14.1	1.8			
						12.7	1.8			
						12.4	2.6			
						15.4	3			
						15	3.2			
					Average	13.625	2.566666667			
					Standard Deviation	1.178693421	0.559761854			

941		38.2	-78.5	28.7		10.4	2.2		X	
			281.5			11.2	1.6			
						10.9	1.5			
						10.5	1.2			
						11.1	1.5			
						10.8	1.5			
						9.6	1.1			
						7.5	0.8			
						10.1	1.3			
						7.9	1			
						9.4	1.2			
						10	1.9			
					Average	9.95	1.4			
					Standard Deviation	1.193543235	0.388470193			
942		37.0	-72.7	28.3		10.1	1.8		X	
			287.3			8.9	1.4			
						7.4	1.3			
						9.8	1.8			
						9.4	0.9			
						8.9	1.7			
						9.2	1.5			
						11.9	1.7			
						10.3	1.9			
						12.2	2.3			
						9.4	1			
						10.8	1.9			
					Average	9.858333333	1.6			
					Standard Deviation	1.332433408	0.4			
943		32.8	-78.8	8		13.3	2.8		X	
			281.2			13	3.1			
						14.3	3.4			
						14.9	4			
						13	3.7			

						12.7	2.7			
						12.9	2.5			
						13.7	3.2			
						13.3	2.8			
						13	3			
						14.2	3.6			
						13.9	3.4			
					Average	13.51666667	3.183333333			
					Standard Deviation	0.682020172	0.450924975			
944		39.7	-73.9	14.1		10.2	1.4		X	
			286.1			9.5	1.5			
						10.7	1.4			
						10.4	1.4			
						12.1	1.5			
						11.3	1.6			
						13.4	1.6			
						12	2.7			
						10	1.2			
						10.8	1.4			
						10.2	1.3			
						10	1.2			
					Average	10.88333333	1.516666667			
					Standard Deviation	1.124789543	0.395045068			
945		40.4	-75.0	14.1		10.3	0.9		X	
			285.0			10.5	0.9			
						10.5	0.9			
						10.1	1			
Cuts into Highland but mostly mare)						10.4	1.2			
						12.2	2			
						11.2	1.7			
						9.8	0.9			
						6.3	0.5			
						9.9	1.2			
						9.8	1.2			

						10.4	1.9			
					Average	10.11666667	1.191666667			
					Standard Deviation	1.375654114	0.454189254			
946	Harding	43.5	-71.1	22.6		13.1	2		X	
			288.9			12.3	1.2			
						13.2	2.2			
						17	4.3			
						15	2			
						14.1	1.9			
						12.9	1			
						10.7	0.5			
						13	1.9			
						14.3	2.6			
						12.9	1.8			
						12.2	1.2			
					Average	13.39166667	1.883333333			
					Standard Deviation	1.582551641	0.959008326			
947		47.7	-74.9	8.6		10.8	1.7		X	
			285.1			12.8	2.6			
						13.5	2.6			
						14	2.8			
						13.5	5.1			
						13.1	3.3			
						10.4	1.8			
						11.4	2.1			
						10.7	2.2			
						10.3	1.7			
						11.6	2.7			
						12.5	2.1			
					Average	12.05	2.558333333			
					Standard Deviation	1.337229157	0.938527215			
948		49.8	-71.8	12.5		11.6	1.4		X	
			288.2			13.4	1.8			

						13.6	2			
						14.1	2.1			
						11.8	1.5			
						10.9	1			
						9.3	0.8			
						11.5	1.1			
						11.8	1.1			
						10.1	1.3			
						12.5	2.1			
						12.7	2.3			
					Average	11.94166667	1.541666667			
					Standard Deviation	1.421560176	0.503548018			
949		47.6	-79.3	13		4.4	0.3	X		
			280.7			2	0.5			
						3.5	0.5			
						5.8	0.7			
						5.5	0.5			
						6.1	0.8			
						4.7	0.6			
						3.7	0.5			
						2.5	0.6			
						3.3	0.4			
						2.8	0.4			
						3	0.5			
					Average	3.941666667	0.525			
					Standard Deviation	1.349382575	0.135680105			
950		53.9	-78.3	10.5		2.6	0.3	X		
			281.7			3.1	0.4			
						4.7	0.3			
						5.8	0.2			
						6.1	0.5			
						13	2.9			
						2.1	0.3			
						8.4	1			

						11.3	1.1			
						7.1	0.3			
						2.2	0.2			
						2.4	0.5			
					Average	5.733333333	0.666666667			
					Standard Deviation	3.662173556	0.761975105			
951		56.6	-76.8	13.1		5	0.2	X		
			283.2			7.4	0.4			
						8.2	0.2			
						8.8	0.3			
						10.7	0.5			
						9.1	0.1			
						14.5	0.4			
						9.3	0.5			
						10.1	0.5			
						7.6	0.2			
						6	0.3			
						7.4	0.3			
					Average	8.675	0.325			
					Standard Deviation	2.448422498	0.135680105			
952		56.9	-75.2	8		6.8	0.2	X		
			284.8			6	0.3			
						7.5	0.3			
						8.2	0.4			
						9.3	0.5			
						10.9	0.9			
						10.8	0.9			
						9.5	0.3			
						6.5	0.2			
						6.4	0.3			
						6.8	0.3			
						6.3	0.4			
					Average	7.916666667	0.416666667			
					Standard Deviation	1.783170483	0.240580107			

953		54.8	-78.9	8.4		2.1	0.3	X		
			281.1			4.8	0.5			
						3.6	0.1			
						5.6	0.4			
						5.2	0.5			
						7.4	1.4			
						7.7	0.9			
						5.8	0.5			
						5.6	0.4			
						3.8	0.5			
						3.4	0.4			
						2.7	0.2			
					Average	4.808333333	0.508333333			
					Standard Deviation	1.75056268	0.34234043			
954		65.9	-72.3	16.5		0.4	0.1	X		
			287.7			2.6	0.2			
						4.5	0.3			
						4.9	0.4			
						4.7	0.3			
						4.6	0.5			
						4.9	0.2			
						5.8	0.4			
						8	0.9			
						3.9	0.2			
						4.7	0.1			
						2.2	0.1			
					Average	4.266666667	0.308333333			
					Standard Deviation	1.901355179	0.227469612			
955		69.4	-73.3	29.1		0.1	0	X		
			286.7			1.3	0.1			
						2	0.1			
						4.7	0.5			
						2.2	0.1			

						5.8	0.4			
						5.6	0.3			
						6.1	0.4			
						3.7	0.2			
						3.6	0.1			
						2.8	0.1			
						2.2	0.1			
					Average	3.341666667	0.2			
					Standard Deviation	1.910953276	0.159544807			
956		66.5	-77.6	12.1		1.6	0.1	X		
			282.4			1.9	0			
						1	0			
						5.8	0.5			
						9.8	1.1			
						11.4	1.5			
						12.5	1.4			
						12.2	1			
						8.3	1.4			
						5.1	0.5			
						1.4	0.1			
						2	0.1			
					Average	6.083333333	0.641666667			
					Standard Deviation	4.559472325	0.600694043			
957		62.6	-76.7	33.7		3.5	0.1	X		
			283.3			4.9	0.1			
						4.5	0.1			
						5.4	0.4			
						5.8	0.3			
						10	0.6			
						5.4	0.4			
						5.5	0.3			
						5.8	0.3			
						6.6	0.4			
						4.1	0.3			

					4.8	0.1			
				Average	5.525	0.283333333			
				Standard Deviation	1.636584581	0.158592292			
958	69.6	-77.7	11.5		2.1	0.2	X		
		282.3			3.3	0.2			
					4.2	0.1			
					4.4	0.2			
					7.4	1			
					7.2	0.4			
					11.5	1.6			
					12.6	2.3			
					5.4	0.2			
					4.8	0.2			
					4.3	0.4			
					3.3	0.3			
				Average	5.875	0.591666667			
				Standard Deviation	3.265557171	0.692109205			
959	69.2	-69.0	11		0.8	0.1	X		
		291.0			1.4	0.1			
					2.1	0.2			
					6.7	0.4			
					1.8	0.1			
					8.7	0.7			
					5.2	0.3			
					4.3	0.5			
					1.8	0.2			
					1.1	0.1			
					1.2	0.1			
					0.9	0.1			
				Average	3	0.241666667			
				Standard Deviation	2.612209096	0.197522534			
960	68.4	-66.6	10		0.3	0.1	X		
		293.4			0.9	0.1			

						1.5	0.2			
						5.7	0.6			
						5.5	0.5			
						6.4	0.3			
						6.3	0.5			
						4.1	0.3			
						1.6	0.1			
						4.7	0.2			
						0.8	0.1			
						1.6	0.1			
					Average	3.283333333	0.258333333			
					Standard Deviation	2.370973461	0.183195541			
961	Markov	53.4	-62.2	40		6.9	0.6		X	
			297.8			11.1	1.1			
						5.9	0.4			
						9.2	0.6			
						9.3	0.6			
						12	1.2			
						7.4	0.3			
						10.5	0.6			
						10.8	1.2			
						7.1	0.7			
						11.6	1.5			
						7.8	0.6			
					Average	9.133333333	0.783333333			
					Standard Deviation	2.071597246	0.371320331			
962		55.5	-61.2	9.3		5.4	0.2		X	
			298.8			6.4	0.2			
						8.3	0.2			
						9.9	0.6			
						7.2	0.4			
						8.1	0.5			
						9.4	0.6			
						7.8	0.4			

						6.9	0.3			
						6.3	0.3			
						6.2	0.2			
						7	0.3			
					Average	7.40833333	0.35			
					Standard Deviation	1.400973687	0.150755672			
963		50.0	-61.5	8		10.9	0.8		X	
			298.5			13.5	1			
						13.7	1.3			
						14.1	1.1			
						13.5	2.2			
						14	1.2			
						13.7	1			
						14.9	1.9			
						12.5	1.5			
						14	1.1			
						13	1			
						14.3	1.3			
					Average	13.50833333	1.283333333			
					Standard Deviation	1.02465811	0.40638838			
964	Dechen	46.0	-67.6	11.7		15.9	3.3		X	
			292.4			15.7	3.2			
						15.8	3			
						16.9	5.1			
						15.3	1.1			
						16	4			
						16.7	2.9			
						15.8	3.6			
						16.6	3.8			
						16	3.8			
						16.9	3.3			
						14.3	1.8			
					Average	15.99166667	3.241666667			
					Standard Deviation	0.740341854	1.028200841			

965		42.8	-67.2	6.3		15.6	1.8		X	
			292.8			15.9	1.2			
						15.8	1.5			
						16.1	1.7			
						16.7	2.5			
						15.1	0.2			
						15.6	1.5			
						15.4	1.8			
						15	1.5			
						15.4	1.4			
						15.4	1.5			
						16	1.6			
					Average	15.66666667	1.516666667			
					Standard Deviation	0.469687194	0.523681606			
966		37.4	-60.3	10.8		16.3	2.8		X	
			299.7			16.6	4.2			
						16.5	3.9			
						16.9	4.4			
						14.8	0.9			
						17.2	3			
						15.2	1			
						16.2	1.6			
						16.1	2.6			
						15.2	2.2			
						16	3.1			
						15.8	3.1			
					Average	16.06666667	2.733333333			
					Standard Deviation	0.72026931	1.151547049			
967	Naumann	35.2	-61.6	10		16	2.6		X	
			298.4			16	2.7			
						16.3	2.7			
						17	2.7			
						15.8	1.6			

						17	2.4			
						16.3	2			
						16.5	2.4			
						16	2.6			
						16.1	3.2			
						15.9	2.8			
						15.7	2.9			
					Average	16.21666667	2.55			
					Standard Deviation	0.428174419	0.418872947			
968	Lichtenburg	31.8	-67.3	17.3		14.6	4		X	
			292.7			13.7	3.7			
						12	2.6			
						13.5	2.9			
						12.5	2.9			
						14.3	3.1			
						13.8	3.5			
						13.7	3.3			
						12.2	3.3			
						13.1	3.3			
						12.6	2.9			
						12.9	3.1			
					Average	13.24166667	3.216666667			
					Standard Deviation	0.825126253	0.388079967			
969	Briggs	26.5	-68.8	39.4		16	3.4		X	
			291.2			15.3	2.8			
						15.1	6.9			
South Rim indistinct						16.7	4.3			
Readings started from South East rim						16	4.7			
						15	2.4			
						14.8	2.5			
						12.8	1.8			
						12.9	2			
						13.5	2.7			
						15.2	3.7			

						16	3.6			
					Average	14.94166667	3.4			
					Standard Deviation	1.262363104	1.416140722			
970	Selecus	21.1	-66.3	43.9		15.5	3.7		X	
			293.7			15.4	3.6			
						14.4	3.2			
						12.2	3.3			
						14.7	3.6			
						13.1	4.3			
						11.7	2.6			
						13.1	2.9			
						13.5	2.8			
						16.1	3.8			
						15.2	3.9			
						15.3	3.4			
					Average	14.18333333	3.425			
					Standard Deviation	1.426905956	0.493825512			
971		22.9	-61.8	7.8		17	5.4		X	
			298.2			17	4.8			
						17.1	4.1			
						17.1	4.6			
						17.4	5.8			
						17.3	5.8			
						16.5	2.8			
						16.9	3.1			
						17.2	4.8			
						17.1	5.3			
						17	5.3			
						17.2	5.6			
					Average	17.06666667	4.783333333			
					Standard Deviation	0.226969495	0.99620492			
972	Galilaei	10.5	-62.6	15.5		18.6	9.1		X	
			297.4			18.4	8.3			

						17.8	7.9			
						17.5	5.4			
						17.9	5.4			
						18.3	8.5			
						18.4	8.6			
						18.4	9.5			
						18.2	9			
						18.6	5			
						18.5	8.4			
						17.9	7.2			
					Average	18.20833333	7.691666667			
					Standard Deviation	0.352802632	1.576796714			
973		11.4	-67.4	15.8		11.7	2.8		X	
			292.6			15.9	6			
						13	3.8			
						12	2.9			
						10.3	2.4			
						10.6	1.7			
						11.4	2.1			
						13.3	2.8			
						12.3	2.3			
						14.6	3.5			
						14.7	3.7			
						11.1	1.8			
					Average	12.575	2.983333333			
					Standard Deviation	1.762810256	1.177696776			
974		10.3	-69.1	10		14.1	2.4		X	
			290.1			13.4	2.4			
						14.4	3			
						16.4	3.3			
						15.3	2.3			
						16.5	3.8			
						13.2	2.5			
						14.2	2.8			

						12.9	2.3			
						13.4	2			
						14.6	2.9			
						16	3			
					Average	14.53333333	2.725			
					Standard Deviation	1.258666923	0.506548032			
975		2.8	-67.9	13.3		5.9	0.5	X		
			292.1			5.3	0.8			
						5.2	0.5			
						5.3	0.7			
						5.8	0.5			
						5.7	0.4			
						5.2	0.5			
						6.6	0.5			
						5.7	0.6			
						5.4	0.6			
						6	0.6			
						4.4	0.5			
					Average	5.541666667	0.558333333			
					Standard Deviation	0.543487615	0.108362467			
976		5.1	-61.3	10.6		3.9	0.5	X		
			288.7			7.1	0.7			
						6.8	0.4			
						6.4	0.4			
						6.2	0.4			
						6.2	0.6			
						7.4	0.7			
						5.1	0.6			
						5	0.4			
						5.9	0.7			
						6.7	0.6			
						7.5	0.6			
					Average	6.183333333	0.55			
					Standard Deviation	1.070966711	0.124316312			

977	Reiner	6.9	-54.7	27.9		18.5	9.8		X	
			305.3			18.6	9.7			
						18.6	9.8			
						18.5	9.8			
						17.9	7.5			
						18.5	9			
						18.3	8.4			
						18.2	7.9			
						18	7.1			
						17.9	7.2			
						18.5	9.9			
						18.4	9.1			
				Average		18.325	8.766666667			
				Standard Deviation		0.263283463	1.097379799			
978		9.1	-54.5	8.3		17.4	6.9		X	
			305.5			17.6	8			
						17.8	7.8			
						17.6	8			
						14.9	6.2			
						17.4	6.4			
						17.1	7			
						17.5	7.1			
						17.5	7.5			
						17.4	7.4			
						17.6	7.5			
						17.5	7.5			
				Average		17.275	7.275			
				Standard Deviation		0.766485486	0.577022136			
979		5.1	-51.3	10		18	7.73		X	
			308.7			18	6.2			
						17.8	7			
						17.5	5.3			
						17.3	5.6			

						17.4	5.5			
						17.6	8.1			
						17.8	6.9			
						17.7	6.9			
						18	7.3			
						18	7.3			
						17.7	6.8			
					Average	17.73333333	6.719166667			
					Standard Deviation	0.246182982	0.893231705			
980	Marius	11.9	-50.6	40.1		18.8	11		X	
			309..4			18.6	10.3			
						17.6	9.4			
						18.2	10.7			
						18.1	9.7			
						18.5	12.6			
						17.7	10.8			
						18.7	11.9			
						17.9	10.1			
						18.6	11.6			
						17	2.3			
						18.9	11.5			
					Average	18.21666667	10.15833333			
					Standard Deviation	0.576562436	2.643158693			
981		15.9	-55.4	7		18.8	12.2		X	
			304.6			18.5	11.7			
						18.2	10.1			
						18	11.8			
						17.4	9.3			
						17.6	9.4			
						18.8	11.9			
						18.6	11.7			
						18.6	11.6			
						18.2	10.6			
						18.4	11.6			

					18	11.8			
				Average	18.25833333	11.14166667			
				Standard Deviation	0.448144322	1.018428677			
982		21.5	-51.9	10.4	16.5	4.6	X		
			308.1		14.5	4.4			
					16.7	4.9			
					16.7	5.4			
					16	2.9			
					16.6	4.8			
					16.9	6			
					16.7	5.1			
					16.8	5.1			
					16.9	5.2			
					16.6	4.9			
					16.6	3.8			
				Average	16.45833333	4.758333333			
				Standard Deviation	0.659832394	0.79482226			
983	Raman	27.0	-54.9	8.6	15.7	1.5	X		
			305.1		14.4	1.8			
					14.5	2.3			
					11.9	1.1			
ut into Highland material but mostly Mare)					14.1	2.7			
					12.9	1.2			
					13.8	1.8			
					14.7	2.7			
					15.6	2.3			
					15.3	1.7			
					15.6	2			
					14.8	1.3			
				Average	14.44166667	1.866666667			
				Standard Deviation	1.150856071	0.548275533			
984		28.9	-59.8	7.8	17.5	7.4	X		
			300.2		17.7	7.8			

						17.3	5.5			
						17.4	6.7			
						17.7	7.2			
						17.2	5.6			
						17.5	5.8			
						17.2	6.4			
						17.5	7.4			
						17.5	6.7			
						16.5	3.2			
						17.8	6.5			
					Average	17.4	6.35			
					Standard Deviation	0.341121146	1.236196513			
985	Schiapelli	23.3	-58.5	30		17.8	8.4		X	
			301.5			17.5	7.5			
						17.7	6.9			
						17.6	6.6			
						17.3	5.7			
						17.2	6.6			
						17.3	5.3			
						17.6	6.8			
						18.2	6.1			
						18.1	8.5			
						18	7.9			
						16.9	7.2			
					Average	17.6	6.958333333			
					Standard Deviation	0.388470193	1.002232357			
986	Neilsen	31.1	-51.5	10		16	4.2		X	
			308.5			15.8	3.6			
						16.8	3.7			
						17.1	6.2			
						17	5.4			
						15.9	3.3			
						16.1	3.7			
						15.5	3			

						15.9	4.7			
						15.5	4			
						16	3.6			
						16.7	3.6			
					Average	16.19166667	4.083333333			
					Standard Deviation	0.561585958	0.92425236			
987		38.6	-56.7	7		16	3.8		X	
			303.3			16.1	3.2			
						16.3	4.9			
						16.7	5.4			
						14.9	1.7			
						15.8	3.1			
						16.6	4.4			
						15.9	2.9			
						16.1	3.1			
						16.1	3.5			
						16.3	4.9			
						15.4	2.4			
					Average	16.01666667	3.608333333			
					Standard Deviation	0.493288286	1.108199468			
988		41.5	-57.7	5		14.9	2.4		X	
			302.3			15	2.4			
						14.7	2.8			
						14.6	2.9			
						14.2	2.8			
						14.1	2.9			
						14.6	2.2			
						15.1	2.3			
						14.7	2.4			
						14.7	2.6			
						15	2.6			
						15.2	2.4			
					Average	14.73333333	2.558333333			
					Standard Deviation	0.336650165	0.242930343			

989		46.8	-51.7	6.4		10.4	1.2		X	
			308.3			11.4	1.6			
						11.9	1.9			
						13.1	2.2			
						15	2.9			
						15.3	3			
						13.6	2.3			
						10.1	0.7			
						11.4	1.3			
						10.4	1.2			
						10.4	0.8			
						12.2	1.6			
				Average		12.1	1.725			
				Standard Deviation		1.798989615	0.754531763			
990		49.9	-55.7	5		12.7	0.8		X	
			304.3			12.9	1			
						11.6	1.1			
						14.7	2.8			
						14.6	1.3			
						13.6	1.3			
						13.6	1.3			
						12.8	0.7			
						11.9	0.8			
						11.9	1.1			
						11.7	0.9			
						12.4	0.9			
				Average		12.86666667	1.166666667			
				Standard Deviation		1.067140046	0.554868262			
991		46.7	-54.8	5		13.2	1		X	
			305.2			13.3	0.7			
						14.3	0.8			
						15.2	0.6			
						15.4	1.3			

						15.7	2.2			
						15.7	1.7			
						15.2	1			
						14.2	0.8			
						13.9	0.9			
						13.2	1			
						13.9	0.8			
					Average	14.43333333	1.066666667			
					Standard Deviation	0.967032324	0.461880215			
992		50.6	-59.7	11.6		14.5	2.8		X	
			300.3			13	1.4			
						11.1	1			
						12.4	1.5			
						13.8	2.2			
						12.5	3.3			
						14.7	2.5			
						14.8	1.7			
						13.2	1.4			
						13.1	1.2			
						9.1	0.9			
						10.8	1.2			
					Average	12.75	1.758333333			
					Standard Deviation	1.721257468	0.766880734			
993		53.7	-52.8	7.5		8.2	0.6		X	
			307.2			9.4	0.6			
						10	0.7			
						10.8	1			
						7.9	0.3			
						8.7	1.1			
						9.8	0.6			
						9.5	0.5			
						9.3	0.7			
						8	0.6			
						9.1	0.6			

						8.4	0.7			
					Average	9.091666667	0.666666667			
					Standard Deviation	0.883647743	0.210338832			
994		59.1	-56.8	12.5		5.2	0.3		X	
			303.2			5.1	0.3			
						7.1	0.3			
						5.6	0.2			
						7.9	0.4			
						8.1	0.5			
						7.2	0.5			
						6.3	0.4			
						5.6	0.2			
						5.2	0.3			
						6.7	0.6			
						4.4	0.3			
					Average	6.2	0.358333333			
					Standard Deviation	1.196206124	0.124011241			
995		59.6	-51.0	10		4.1	0.2		X	
			309.0			5	0.1			
						3.9	0.1			
						7.4	0.3			
						9	1			
						8.3	0.6			
		oval shaped				10.4	2			
						10.8	1.3			
						6.1	0.4			
						4.3	0.1			
						3.2	0.1			
						4.4	0.2			
					Average	6.408333333	0.533333333			
					Standard Deviation	2.679368424	0.603524999			
996		67.8	-59.5	14.5		5.4	0.3		X	
			310.5			0.8	0			

						0.6	0.1			
						2	0.1			
						4.7	0.4			
						6.1	0.3			
						1.4	0.1			
						8	0.6			
						2.2	0.1			
						1.9	0.1			
						1.1	0.1			
						0.9	0.1			
					Average	2.925	0.191666667			
					Standard Deviation	2.47207127	0.172986249			
997		68.2	-52.6	6.9		3.2	0.2	X		
			307.4			2.8	0.1			
						3.3	0.2			
						4.2	0.2			
						6	0.4			
						6	0.2			
						4.7	0.1			
						6.7	0.6			
						3.9	0.2			
						5.6	0.3			
						3.2	0.2			
						4.9	0.2			
					Average	4.541666667	0.241666667			
					Standard Deviation	1.310418624	0.137895437			
998		64.0	-47.7	8		2.9	0.1	X		
			312.3			4.7	0.1			
						5.7	0.4			
						6.2	0.2			
						6.9	0.5			
						7.4	0.9			
						6	0.3			
						7.2	1			

						4.3	0.2			
						5.4	0.2			
						3.8	0.1			
						3.8	0.1			
					Average	5.358333333	0.341666667			
					Standard Deviation	1.46564186	0.311764285			
999		65.1	-40.3	8.9		6.9	0.5	X		
			319.7			6.1	0.2			
						6	0.2			
						9.3	0.9			
						9.1	1.3			
						10.1	1.4			
						9.8	2			
						11.2	1.7			
						14.4	4.2			
						6.9	0.7			
						5.2	0.2			
						5.3	0.3			
					Average	8.358333333	1.133333333			
					Standard Deviation	2.785827226	1.149176253			
1000		62.2	-39.4	12		7.5	0.4	X		
			320.6			8.2	0.7			
						8.1	0.4			
						10.8	1			
						11.8	1			
						11.1	0.7			
						11.4	1.2			
						10.2	0.9			
						8.5	0.3			
						7.3	0.5			
						6.4	0.3			
						6.4	0.3			
					Average	8.975	0.641666667			
					Standard Deviation	1.978118941	0.320392751			

1001		58.5	-42.3	12.2		8.9	0.6		X	
			317.7			9.2	0.5			
						8.8	0.6			
						10.4	0.6			
						10.3	1.1			
						6	0.6			
						8.9	0.7			
						10.8	0.9			
						7.6	0.4			
						7.7	0.4			
						7.5	0.5			
						7.1	0.5			
				Average		8.6	0.61666667			
				Standard Deviation		1.46411624	0.203752672			
1002	Robinson	58.9	-45.3	24		7.9	0.3		X	
			314.7			9.1	0.5			
						5.8	0.2			
						6.9	0.3			
						7.8	0.4			
						10.5	0.4			
						11.8	1			
						13.1	1			
						9.4	0.6			
						8.1	0.4			
						9.7	0.4			
						6.8	0.5			
				Average		8.908333333	0.5			
				Standard Deviation		2.140712852	0.25584086			
1003		57.3	-44.5	13		7.6	0.4		X	
			315.5			8.7	0.6			
						7.3	0.5			
						7.8	0.6			
						8.3	1.4			

						3.1	0.7			
						10.8	0.7			
						11	1			
						10	0.6			
						7.9	0.5			
						6.5	0.3			
						8.3	0.6			
					Average	8.108333333	0.658333333			
					Standard Deviation	2.096082204	0.29063671			
1004		55.4	-44.7	10.2		11.1	0.6		X	
			315.3			11.3	0.7			
						11.4	0.7			
						13.6	0.9			
						14.5	1.3			
						15.5	2.3			
						16	2.2			
						13.1	0.2			
						17.5	4.5			
						15.6	1.3			
						12.3	0.8			
						13.4	0.5			
					Average	13.775	1.333333333			
					Standard Deviation	2.075451758	1.187306603			
1005	Harpalus	52.7	-43.0	37.8		8.6	0.5		X	
			317.0			10	0.6			
						9.6	0.5			
						9	0.6			
						14.1	1.9			
						12.8	1.2			
						7	0.4			
						13.3	1			
						13	1.9			
						11.6	1.7			
						11.8	0.8			

						8.6	0.6			
					Average	10.78333333	0.975			
					Standard Deviation	2.277491975	0.565886272			
1006		47.6	-42.3	17.6		7.2	0.4		X	
			317.7			6.7	0.4			
						8	0.4			
						10.6	0.5			
						10.5	0.8			
						11.1	0.7			
						7.4	0.4			
						10.7	1.1			
						9.5	0.5			
						7	0.4			
						7.2	0.3			
						7	0.3			
					Average	8.575	0.516666667			
					Standard Deviation	1.745709025	0.23677121			
1007		46.9	-44.9	19.6		7.3	0.6		X	
			315.1			10	0.6			
						11	0.7			
						10.1	1			
						12.7	0.8			
						11.6	1			
						12.2	0.8			
						12.6	1			
						10	0.7			
						11.1	0.8			
						8.7	0.5			
						8.2	0.5			
					Average	10.45833333	0.75			
					Standard Deviation	1.741711976	0.183402191			
1008		40.9	-45.3	10		10.2	1.1		X	
			314.7			10.7	1.2			

						11.7	1.3			
						13	1.8			
						13.7	1.9			
						12.8	1.3			
						14	2.4			
						13.7	1.8			
						12.3	1.6			
						10.9	1.2			
						10.8	1.3			
						10.6	1.2			
					Average	12.03333333	1.508333333			
					Standard Deviation	1.385859322	0.394181161			
1009		44.7	-41.8	7		9.6	0.6		X	
			318.2			8.6	0.9			
						8.5	0.6			
						9.4	0.8			
						9.4	1.1			
						11.8	1.9			
						12	0.9			
						10.6	0.8			
						10.3	0.6			
						10	0.5			
						9.6	0.6			
						9.1	0.6			
					Average	9.908333333	0.825			
					Standard Deviation	1.113926987	0.381682876			
1010		44.0	-46.1	9.7		9.4	0.8		X	
			313.9			9.6	0.8			
						10.7	1.5			
						10.4	1.3			
						8.2	1.2			
						9.8	1.1			
						10.8	1.2			
						12.5	1.5			

						10.4	1.1			
						7.6	0.6			
						9	1			
						10	1.2			
					Average	9.86666667	1.10833333			
					Standard Deviation	1.28086145	0.27455197			
1011		40.7	-42.8	6		10.9	1.2		X	
			319.2			10.8	1.3			
						11.3	1.1			
						11	1.9			
						13.5	1.5			
						11.8	1.2			
						11.5	1.4			
						11.7	1			
						10.7	1.1			
						10.7	1.4			
						11.1	1.4			
						11.4	1.5			
					Average	11.36666667	1.33333333			
					Standard Deviation	0.76910022	0.24246211			
1012		37.4	-45.4	6.8		11.6	1.6		X	
			314.6			10	2			
						11.5	1.4			
						10	1.6			
						12.1	1.7			
						13.6	1.9			
						11.7	1.6			
						13.2	1.8			
						12.1	2.1			
						11.8	1.8			
						11.2	1.7			
						11.6	1.7			
					Average	11.7	1.74166667			
					Standard Deviation	1.05658110	0.19286519			

1013	Wollaston	30.1	-46.7	9.8		15.3	3		X	
			313.3			15	2.4			
						14.7	2.2			
						15.6	2.9			
						16.3	3.9			
						16.7	4.2			
						17	4.2			
						16.8	4.3			
						16.2	3.3			
						15.7	2.7			
						14.8	1.9			
						15.9	3.3			
					Average	15.83333333	3.191666667			
					Standard Deviation	0.786630713	0.821814327			
1014		25.9	-47.6	8.5		13	2.3		X	
			312.4			13.1	1.7			
						12.6	2.3			
						9.9	2.4			
						9.4	2			
						12.2	2			
						13	2.2			
						12.4	2.7			
						8.4	1			
						13.2	1.8			
						13.3	2.2			
						12.6	2.9			
					Average	11.925	2.125			
					Standard Deviation	1.687453703	0.491981153			
1015	Aristarchus	23.6	-47.3	38.6		7	1.4		X	
			312.7			7.5	1.3			
						11.4	2.3			
						10.7	1.8			
						14.1	0.3			

						10.5	2.1			
						9.2	2.1			
						14.7	2.7			
						14.3	2.2			
						15.7	3.3			
						5.4	1.3			
						7.5	0.9			
					Average	10.66666667	1.808333333			
					Standard Deviation	3.444978779	0.818489			
1016		16.4	-47.1	12		17.3	7.3		X	
			312.9			17.3	7.5			
						16.7	6.2			
						16.4	6.2			
						17	6.9			
						17.2	6.7			
						17.6	7.4			
						17.1	7.3			
						17.4	7.7			
						17.2	6.5			
						17.4	7.8			
						17.4	7.8			
					Average	17.16666667	7.108333333			
					Standard Deviation	0.333938844	0.591543948			
1017		12.6	-45.8	15.2		17.1	6.7		X	
			314.2			16.7	6.2			
						16.7	4.9			
						16.9	5.9			
						16.4	4.4			
						15.9	4.4			
						16	4.9			
						17.2	6.8			
						17.9	9.3			
						17.2	7.7			
						16.7	6.4			

						16.5	7.2			
					Average	16.76666667	6.233333333			
					Standard Deviation	0.551581748	1.459970942			
1018		16.0	-42.4	8.1		16.6	5.2		X	
			317.6			16.3	4.2			
						15.8	3.8			
						16.4	4.7			
						17.1	4.8			
						16.1	5.1			
						16.9	6.1			
						16.7	3.7			
						16.8	4.4			
						16.9	5.5			
						16.6	4.8			
						16.5	5.4			
					Average	16.55833333	4.808333333			
					Standard Deviation	0.367938565	0.708979206			
1019		10.0	-41.7	12.2		17.1	6.1		X	
			318.3			16.9	5.8			
						15.4	5.1			
						14.7	4.3			
						16	4.6			
						16.4	5.1			
						16.4	3			
						15.9	3			
						17.1	5.8			
						16.7	5.9			
						16.4	6			
						16.3	5.4			
					Average	16.275	5.008333333			
					Standard Deviation	0.70340083	1.092501994			
1020	Suess	4.3	-47.5	8.3		17.7	6.8		X	
			312.5			17.8	7.5			

						17.7	7			
						17.8	6.9			
						17.8	7			
						17.6	7.4			
						17	4.4			
						17.9	7.7			
						17.9	7.3			
						17.7	7			
						17.8	3.1			
						17.1	4.4			
					Average	17.65	6.375			
					Standard Deviation	0.293876907	1.510042143			
1021		0.3	-40.0	9.6		14.4	4		X	
			320.0			15.8	5.6			
						15.5	6.8			
						15.2	5.5			
						16	4.9			
						14.2	4.5			
						13.4	3.8			
						14.3	4.3			
						14.4	4			
						13.7	4.4			
						13.8	4.1			
						13.3	4			
					Average	14.5	4.658333333			
					Standard Deviation	0.922447338	0.894892917			
1022		4.7	-46.4	6.7		17.9	8.6		X	
			313.6			17.5	6.6			
						18	7.7			
						17.8	7.7			
						16.7	3.7			
						16.8	3.8			
						17.3	5.3			
						18.3	8.6			

						18.3	9.2			
						18	8.3			
						18.3	8.4			
						18.1	8.5			
					Average	17.75	7.2			
				Standard Deviation		0.560032467	1.919753772			
1023	Enke	4.5	-36.6	28.5		11.2	2		X	
			323.4			12.2	2.1			
						11.9	2.1			
						12.4	2.4			
						12.8	2.3			
						11.6	2.2			
						11.5	2.4			
						11.2	2.1			
						13.2	2			
						13.7	2.3			
						10.9	2			
						11.4	2.1			
					Average	12	2.166666667			
				Standard Deviation		0.875941052	0.149747262			
1024		2.3	-36.6	10.3		14	3.21		X	
			323.4			13.6	3.2			
						13.1	3			
						11.8	2.8			
						12.7	2.7			
						12.3	2.4			
						11	1.9			
						10.7	2.2			
						10.1	2.3			
						11.6	3.4			
						13.8	3			
						8.4	2.3			
					Average	11.925	2.700833333			
				Standard Deviation		1.678270213	0.475785634			

1025	Kunowski	3.2	-32.3	17.2		13.4	3.8		X	
			327.7			13.5	4			
						13.1	3.7			
						12.9	3.5			
						14.3	4			
						13.8	3.3			
						13.7	3			
						13.8	3.7			
						14.2	4.2			
						13.7	3.2			
						13.1	3.3			
						12.9	3.5			
				Average	13.53333333		3.6			
				Standard Deviation	0.469687194		0.364317544			
1026		4.3	-30.6	10		13.6	4.2		X	
			329.4			14.1	4			
						14.3	4.2			
						14.9	4			
						14.3	4.3			
						13	3.4			
						13.4	3.1			
						14.2	3.6			
						13.7	3.6			
						13.4	3.5			
						13.7	3.3			
						13	3.7			
				Average	13.8		3.741666667			
				Standard Deviation	0.573664457		0.391868098			
1027	Kepler	8.2	-37.8	28.6		12.6	1.7		X	
			322.2			13.3	2.1			
						11.7	1.7			
						12.7	2.6			
						13.8	2.8			

						14.3	2.5			
						13.6	2			
						13.1	2			
						13	1.5			
						12.9	1.6			
						12.5	1.4			
						12.7	1.7			
					Average	13.01666667	1.966666667			
					Standard Deviation	0.679349065	0.455937263			
1028	Milichius	10.0	-30.1	12.8		13.5	2.4		X	
			329.9			13.4	3.4			
						13.5	3			
						13.7	3.4			
						15.3	3.9			
						15.1	4			
						14.3	3.1			
						14.3	3.8			
						13.8	2.6			
						13.7	3			
						13.5	3.1			
						12.9	3.3			
					Average	13.91666667	3.25			
					Standard Deviation	0.709459888	0.490824909			
1029		15.4	-30.7	11.8		14.6	3.8		X	
			329.3			12.8	1.7			
						15	2.9			
						12.2	1.9			
						15.1	2.5			
						14.9	2.3			
						12.7	2.3			
						16.2	3.3			
						14.9	3.2			
						13.3	2.3			
						14.4	3.1			

						13.4	3.6			
					Average	14.125	2.741666667			
					Standard Deviation	1.21440221	0.672117865			
1030		17.0	-39.6	12.4		14.9	2.4		X	
			320.4			15.2	3.1			
						15.4	3.5			
						15.2	3			
						16	3.3			
						16.4	3.9			
						16.3	3.7			
						16.3	3.9			
						16.1	2.9			
						15.4	2.8			
						14.8	2.2			
						14.6	2.3			
					Average	15.55	3.083333333			
					Standard Deviation	0.641730615	0.596708141			
1031	Bessarion	14.8	-37.1	10		7.7	1.2		X	
			322.9			12.7	1.9			
						11.4	2.2			
						13.2	2.6			
						12.4	2.6			
						11.2	2			
						10.7	2.2			
						14.6	2.9			
						13.5	2.7			
						12.4	2.3			
						8.9	2			
						9.3	1.2			
					Average	11.5	2.15			
					Standard Deviation	2.052492941	0.540201982			
1032	Braxley	20.8	-36.7	16.5		13.5	3.2		X	
			323.3			14.6	3.9			

						14.9	3.7			
						15.3	4.4			
						14.9	5.2			
						13.9	3.5			
						15.4	5.8			
						11.1	1.6			
						16	6.9			
						16.2	4.8			
						13.6	4.1			
						14.9	3.9			
					Average	14.525	4.25			
					Standard Deviation	1.375185938	1.345362405			
1033		21.3	-39.3	8.4		17.3	6.6		X	
			320.7			17.3	6.2			
						17.3	5.3			
						16.2	3.6			
						16.2	3			
						16.5	3.2			
						16.9	4.8			
						17.2	5.4			
						17.1	5.9			
						17.3	5.6			
						17.3	5.8			
						17.1	5.4			
					Average	16.975	5.066666667			
					Standard Deviation	0.430908132	1.183472036			
1034		20.7	-34.1	8.9		13.5	3.6		X	
			325.9			14.4	3.9			
						16.6	4.8			
						16	4.4			
						15.4	3.9			
						14.9	3.9			
						15.9	3.3			
						11.1	3.4			

						15	4			
						14	4.1			
						14.3	4.2			
						15.7	3.9			
					Average	14.73333333	3.95			
					Standard Deviation	1.461215766	0.412310563			
1035	Diopharitus	27.5	-34.1	17.6		15.9	2.1		X	
			325.9			16.1	2			
						15.6	2.1			
						16.3	2.3			
						15.1	1.4			
						15.9	2.3			
						15.6	1.5			
						16.7	2.7			
						1.8	2.8			
						16.2	2.7			
						16	2.9			
						16.2	2.8			
					Average	14.78333333	2.3			
					Standard Deviation	4.108712104	0.504524979			
1036	Delisle	29.8	-34.4	24.8		16.8	3.7		X	
			325.4			16.3	3.2			
						16.5	3.7			
						16.8	4.1			
						16.1	3.6			
						17.2	4.4			
						16.4	3.2			
						16.3	4.1			
						17	3.9			
						16.6	3.6			
						16.4	3.3			
						16.3	3.5			
					Average	16.55833333	3.691666667			
					Standard Deviation	0.328794861	0.377692355			

1037	Heis	32.4	-31.8	13.1		15.9	1.6		X	
			328.2			16.1	2.7			
						16.7	3.2			
						17.2	3.7			
						15.2	3			
						14.7	3.8			
						17	3.7			
						16.7	3.2			
						16.2	2.1			
						16	1.7			
						16.4	3			
						16.6	3			
					Average	16.225	2.891666667			
					Standard Deviation	0.721267823	0.745237404			
1038	C. Herschel	34.4	-31.0	13		16.5	3.3		X	
			329.0			16.1	2.7			
						16.6	3.1			
						17.6	4.8			
						15.8	1.8			
						16.2	1.7			
						16.8	2.9			
						16.6	3.1			
						16.3	3			
						15.7	1.7			
						17.7	5.2			
						16.7	2.8			
					Average	16.55	3.008333333			
					Standard Deviation	0.61717833	1.093333795			
1039		37.2	-32.3	7.3		16.2	2.8		X	
			327.7			16	2.3			
						16.4	2			
						16.6	2.3			
						16.9	4.2			

						16.8	1.7			
						18.7	4.5			
						15.9	1.2			
						15.5	1.8			
						15.7	2.6			
						16	2.5			
						16.1	2.4			
					Average	16.4	2.525			
					Standard Deviation	0.838830355	0.96023198			
1040		35.6	-38.4	8.8		12.7	1.4		X	
			321.6			14.4	2.7			
						13.5	2.5			
						13.2	1.7			
						14.8	3.5			
						13.9	3.3			
						13.7	2.8			
						12.7	1.4			
						12.1	1.6			
						13.4	2.3			
						14	2.6			
						14.3	3.3			
					Average	13.55833333	2.425			
					Standard Deviation	0.791383522	0.754531763			
1041		38.5	-338.5	16.2		7.8	0.6		X	
			321.5			9.8	0.8			
						10.1	1			
						10.8	0.7			
						11.8	1.7			
						12.6	1.9			
						11.4	2.6			
						11.2	2.2			
						10.4	2.2			
						11.3	1.7			
						10.7	1.5			

						9.2	1.2			
					Average	10.59166667	1.508333333			
					Standard Deviation	1.268827901	0.654298144			
1042	Gruithuisen	32.8	-39.5	15.2		16.6	4.2		X	
			320.5			17	4.5			
						16.4	4.9			
						16.4	4.1			
						16	3.2			
						15.7	2.8			
						17	3.9			
						16.9	2.7			
						16.9	4.7			
						13.8	5			
						17	5.5			
						17	4.8			
					Average	16.39166667	4.191666667			
					Standard Deviation	0.923883437	0.895908207			
1043		46.8	-37.7	6.3		8.8	0.6		X	
			322.3			8.5	0.4			
						10	1.1			
						9.6	1.3			
						9.6	1.1			
						12.3	1.7			
						12.2	1.7			
						10.1	1			
						10.2	0.6			
						8.7	0.5			
						9.3	0.4			
						9.9	1			
					Average	9.933333333	0.95			
					Standard Deviation	1.218294884	0.462208139			
1044	Bianchi	48.4	-34.0	38.6		7.9	0.4		X	
			326.0			5.6	1.4			

						5.5	0.5			
						7.4	0.5			
						8.9	0.6			
						4.3	0.3			
						7.9	0.4			
						7.5	0.7			
						6.8	0.6			
						5.8	0.4			
						6.2	0.4			
						7	0.3			
					Average	6.733333333	0.541666667			
					Standard Deviation	1.293573861	0.296826651			
1045		48.4	-30.7	5		8.6	0.9	X		
			329.3			8.8	0.6			
		OVAL SHAPED				9.4	0.6			
						8.7	0.6			
						10.9	2.5			
						9.8	1.1			
						9.9	1.8			
						8.1	0.7			
						8.9	1.1			
						8.9	1			
						8.8	0.9			
						9.4	0.6			
					Average	9.183333333	1.033333333			
					Standard Deviation	0.746912838	0.575773524			
1046		41.1	-35.6	5		7.8	0.5	X		
			324.4			9.2	0.8			
						8.9	0.4			
		OVAL SHAPED				7.3	0.4			
						8.8	1.2			
						8.4	1.2			
						6.7	0.5			
						7.5	0.6			

						8.6	0.6			
						8.2	0.5			
						9.9	0.8			
						6	0.5			
					Average	8.108333333	0.666666667			
					Standard Deviation	1.1032665	0.280691786			
1047	Foucault	50.4	-39.8	24.8		8.2	0.4	X		
			320.2			9.3	0.9			
						7.8	0.4			
						9.5	0.6			
						11.1	0.8			
						11.2	0.9			
						8.6	0.6			
						10.5	1.7			
						10.5	0.5			
						7.8	0.5			
						7	0.4			
						8.1	0.6			
					Average	9.133333333	0.691666667			
					Standard Deviation	1.425949976	0.365459445			
1048	Bouguer	52.2	-35.4	22.1		8	0.3	X		
			324.6			7.9	0.4			
						7.1	0.4			
						10	0.9			
						9.5	0.2			
						8.9	0.4			
		ODD SHAPED				8.3	1.4			
						10.8	1.2			
						11.7	0.8			
						11.1	0.9			
						9.5	0.4			
						7.8	0.2			
					Average	9.216666667	0.625			
					Standard Deviation	1.465874442	0.402548698			

1049		58.7	-31.1	18.5		9.2	0.6		X	
			328.9			10.5	1.1			
						8.9	0.6			
						11.5	1.2			
						11.1	0.9			
						9	0.5			
						13.8	2.8			
						14	2.4			
						13.1	1.9			
						9.6	0.8			
						10	0.7			
						9.3	0.8			
					Average	10.83333333	1.191666667			
					Standard Deviation	1.881166627	0.760930451			
1050		58.7	-34.9	17.7		8.5	0.5		X	
			325.1			8.8	0.5			
						9.8	0.4			
						11.6	1.5			
						14	2.5			
						14.3	3.5			
						14.3	1.9			
						11.1	1.1			
						9.6	0.5			
						8.4	0.6			
						7.6	0.4			
						7.8	0.6			
					Average	10.48333333	1.166666667			
					Standard Deviation	2.540520109	1.001211387			
1051		60.2	-37.5	10.3		9.4	0.6		X	
			322.5			6.2	0.3			
						9	0.8			
						9.9	0.7			
						12.3	1.2			

						10.9	1.3			
						11.3	1			
						11.7	1.1			
						10.1	0.6			
						8.7	0.5			
						9.9	0.5			
						14.2	0.7			
					Average	10.3	0.775			
					Standard Deviation	2.017198778	0.31079078			
1052		62.3	-30.1	8.9		9.1	0.4	X	X	
			329.9			9.9	0.8			
						10.7	0.7			
						14.9	2			
						14.8	2.1			
						9.1	0.5			
						13.8	3.2			
						13.8	2			
						8.9	0.7			
						8.3	0.5			
						10.6	1.1			
						9.1	0.5			
					Average	11.08333333	1.208333333			
					Standard Deviation	2.508832881	0.897935342			
1053		66.3	-30.8	9.6		6.6	0.2	X		
			329.2			5.9	0.2			
						5.5	0.1			
						6.8	0.2			
						15	4.3			
						13.3	2.9			
						13.8	4.6			
						10.6	4.9			
						6.4	0.3			
						7.6	0.3			
						4.5	0.1			

						5.2	0.1			
					Average	8.433333333	1.516666667			
					Standard Deviation	3.71858559	2.018024837			
1054		67.7	-37.2	9		4.1	0.2	X		
			322.8			5.6	0.1			
						3.4	0.2			
ues on northern exterior crater slopes						10.3	1.1			
titudes of this region.						11.5	1.5			
						9	0.2			
						12.2	1.1			
						10	1.5			
						8.7	0.3			
						3.4	0.3			
						5.4	0.3			
						7.3	0.1			
					Average	7.575	0.575			
					Standard Deviation	3.148484484	0.552884995			
1055		68.8	-28.2	10		0.7	0.1	X		
			331.8			0	0.1			
						1	0.1			
						2.3	0.1			
						6.5	0.5			
						8.9	0.7			
						10.1	0.6			
						12.1	2			
						9.1	0.7			
						4.2	0.2			
						6.5	0.5			
						1.8	0.1			
					Average	5.266666667	0.475			
					Standard Deviation	4.153275451	0.541252756			
1056		63.8	-29.1	9		6.3	0.2	X		
			330.9			7	0.1			

						7.3	0.6			
						10.8	1			
						9.7	0.8			
						11.1	1			
						11	0.5			
						12.2	1.6			
						11.4	1.6			
						6.7	0.3			
						5.7	0.3			
						4.9	0.2			
					Average	8.675	0.683333333			
					Standard Deviation	2.594443363	0.525414699			
1057		60.3	-27.2	8.3		11.4	0.8		X	
			332.8			10.9	0.7			
						12.8	0.8			
						14.2	1.3			
						13.6	2.5			
						12.4	2.6			
						9.8	0.5			
						10.8	0.7			
						10.9	0.4			
						11.4	0.7			
						12.2	0.7			
						11.4	0.4			
					Average	11.81666667	1.008333333			
					Standard Deviation	1.265509839	0.757337841			
1058		61.7	-22.0	12.8		7.4	0.6		X	
			338.0			5.7	0.3			
						6.6	0.3			
						7.4	0.2			
						12.4	1.5			
						12	2			
						11.4	1.9			
						7	0.3			

						11.2	2			
						14.3	2.5			
						16.1	3.7			
						7.4	0.5			
					Average	9.908333333	1.316666667			
					Standard Deviation	3.412399405	1.124789543			
1059		55.0	-25.2	6.4		11.3	1.2		X	
			334.8			10.4	0.9			
						11.1	1.2			
						10.4	0.9			
						11	1.1			
						7.8	0.7			
						12.6	1.4			
						13.5	3.1			
						12.4	1.6			
						11	1			
						12.1	1.2			
						11	1.1			
					Average	11.21666667	1.283333333			
					Standard Deviation	1.429452109	0.619139187			
1060		54.2	-29.7	17.8		9.4	0.8		X	
			330.3			8.8	0.7			
						9.2	0.6			
						9	0.5			
cut into some Highland but mostly mare.)						9.4	0.7			
						11.4	0.6			
						11.9	0.7			
						12.1	1.4			
						11.4	1.1			
						10.1	0.9			
						8.3	0.3			
						8	0.7			
					Average	9.916666667	0.75			
					Standard Deviation	1.431993736	0.284445234			

1061		50.5	-24.4	14.5		13.6	2.6	X		
			335.6			8.6	3.2			
						10.5	2.6			
						10.7	2.1			
						10	2.1			
						10.1	1.6			
						10.1	1.7			
						8.5	1.4			
						8.6	1.1			
						10.6	1.7			
						9.9	1.8			
						10.4	3.2			
					Average	10.13333333	2.091666667			
					Standard Deviation	1.355348552	0.678847062			
1062		52.2	-29.9	10.6		9.2	0.8	X		
			330.1			9.1	0.9			
						10	1.2			
						10.8	1.5			
						10.9	1.6			
						5.9	0.7			
						8.4	1.5			
						10.7	1.5			
						10.4	1.4			
						10.5	0.9			
						8.9	0.9			
						9.6	0.9			
					Average	9.533333333	1.15			
					Standard Deviation	1.411854572	0.331662479			
1063		47.1	-25.3	10.3		5.8	0.8	X		
			334.7			10.3	1.2			
						10.9	1.4			
						12.3	1.7			
						9.4	1.5			

						12	3			
						9.4	1.8			
						9	1.2			
						9.5	1.5			
						9.6	0.8			
						4.7	0.5			
						6.9	0.5			
					Average	9.15	1.325			
					Standard Deviation	2.315756307	0.686393738			
1064		43.6	-26.7	8.3		16.1	1.9		X	
			333.3			16.3	2.8			
						16.8	3			
						17.3	2.6			
						16.5	2.2			
						17.6	3.4			
						16.9	2.1			
						16.3	1.6			
						17.1	2.2			
						16.3	2.7			
						16.2	1.6			
						15.3	0.7			
					Average	16.55833333	2.233333333			
					Standard Deviation	0.620056205	0.732782162			
1065	Le Verrier	40.2	-20.4	18.9		16.4	3.1		X	
			339.6			16.6	2.6			
						17.2	4.2			
						17.6	3.9			
						16.8	3.1			
						17.6	2.8			
						17.9	4.1			
						16.9	4.5			
						17.2	4.1			
						17.2	3.3			
						16.7	3.3			

						16.2	2.6			
					Average	17.025	3.466666667			
					Standard Deviation	0.517204022	0.665149789			
1066		37.8	-21.1	5.5		15.5	2.7		X	
			338.9			16.2	2.7			
						15.5	2.3			
						16	2.9			
						16	3.2			
						15	0.8			
						15.3	0.7			
						17.5	4.4			
						16.8	2.7			
						15.9	3.1			
						14.9	0.8			
						15.3	0.7			
					Average	15.825	2.25			
					Standard Deviation	0.754531763	1.216926083			
1067	Calini	33.7	-23.9	10.5		16.9	5.5		X	
			336.1			17.3	5.8			
						17	5.3			
						16.9	5			
						16.7	4.5			
						16.8	4.2			
						16.3	2.1			
						17.4	5.2			
						17.1	4.7			
						16.9	5.3			
						17	5.4			
						16.9	5.2			
					Average	16.93333333	4.85			
					Standard Deviation	0.280691786	0.97374628			
1068		35.3	-26.4	6.5		15.9	3.3		X	
			333.6			16.2	4			

						16.1	3.4			
						16.3	2.5			
						16.9	4.4			
						15.8	1.7			
						16.6	2.9			
						16.8	3.5			
						16.7	4			
						16.4	3.6			
						16.8	3.5			
						16.9	4			
					Average	16.45	3.4			
					Standard Deviation	0.389638527	0.744678088			
1069		30.3	-20.7	6.8		16.7	4.1		X	
			339.3			17	4.9			
						16.5	3.6			
						17.2	3.4			
						16.9	2.5			
						17	2.3			
						16.3	1.4			
						17.3	3.3			
						16.9	3.4			
						17.1	4.8			
						16.4	3.6			
						16.6	4.1			
					Average	16.825	3.45			
					Standard Deviation	0.322278818	1.012198328			
1070	Lambert	25.7	-20.9	30		17.5	6.2		X	
			339.1			17.1	5.8			
						16.7	5.5			
						16.8	5			
						16.9	5			
						17	4.5			
						15.5	8.9			
						17.5	8.1			

						17.6	6.2			
						16.9	5.6			
						17.2	6.9			
						17	6.6			
					Average	16.975	6.191666667			
					Standard Deviation	0.547929989	1.290847736			
1071	Euler	23.2	-29.0	24.3		6.6	0.7		X	
			331.0			10.4	1.6			
						12.4	2.6			
						13.7	3			
						15	4.7			
						13.5	4			
						14.8	5.7			
						14.3	5.1			
						14.4	3.5			
						14.8	2.5			
						8.7	1.5			
						10.3	1.4			
					Average	12.40833333	3.025			
					Standard Deviation	2.772087606	1.604043187			
1072	Pytheas	20.5	-20.5	18.5		12.1	2.9		X	
			339.5			14	3.3			
						10.9	2.1			
						11.8	2.3			
						11.3	2.3			
						11.2	2.1			
						6.3	1.6			
						11	2.2			
						10	2.5			
						11.6	2.9			
						11.3	2.5			
						12.9	2.8			
					Average	11.2	2.458333333			
					Standard Deviation	1.8503071	0.460154783			

1073		15.2	-28.2	15.4		11.3	1.9		X	
			331.8			9.6	1.5			
						11.3	2.2			
						10.7	1.7			
ut to a small degree into High;and areas)						11	1.5			
						10.5	1.8			
						10.1	0.8			
						10.7	1.4			
						10.9	1.6			
						11.6	1.9			
						11.2	1.7			
						11.6	2.1			
				Average		10.875	1.675			
				Standard Deviation		0.600189364	0.367114052			
1074		13.1	-20.3	15.7		9.1	1.7		X	
			339.7			9.3	1.5			
						8.5	1.4			
						9.5	1.4			
						9.6	1.5			
						10.6	1.5			
						8.2	1.5			
						10	1.5			
						6.6	1			
						7	1			
						0.3	1.1			
						8.6	1.2			
				Average		8.108333333	1.358333333			
				Standard Deviation		2.717438076	0.227469612			
1075		12.3	-25.8	14.5		11.3	0.8		X	
			334.2			9.8	0.8			
						12	1.2			
						11.4	0.9			
						11.3	1			

into same Highland Material but mostly Mare)						12.5	2			
						12.1	1.2			
						12.9	1			
						11.6	1			
						11.3	1			
						11.4	1.1			
						11.5	1.2			
					Average	11.59166667	1.1			
					Standard Deviation	0.76924796	0.316227766			
1076	Hortensius	6.2	-27.8	14		12.2	2.4		X	
			332.2			11.8	2.6			
						14.1	3.3			
						15.7	4.2			
						14.7	4.7			
						12.4	3			
						11.6	2.3			
						12.2	3.2			
						11.8	2.7			
						13.8	2.8			
						14.1	3			
						12.5	2.8			
					Average	13.075	3.083333333			
					Standard Deviation	1.345108985	0.710740118			
1077		4.3	-21.5	22		13.4	3		X	
			338.5			12.7	2.5			
						12.2	2.9			
						13.9	3.5			
						13.4	3.7			
						13.2	3.1			
						12	2.6			
						12.9	2.8			
						12.9	2.7			
						14.2	3.4			
						13.6	2.9			

						12.8	2.4			
					Average	13.1	2.958333333			
					Standard Deviation	0.649475313	0.405548637			
1078		0.9	-18.6	10.7		10.4	2.3		X	
			341.4			10.4	1.9			
						12.3	2.5			
						11.5	2			
						12	2.7			
						6.7	1.1			
						8.6	1.4			
						10.9	2			
						11.3	2.2			
						11.5	2.3			
						11	2.5			
						12	2.2			
					Average	10.71666667	2.091666667			
					Standard Deviation	1.603877876	0.460154783			
1079	Giambart	0.9	-15.2	24.6		15.8	4.1		X	
			344.8			15.4	4.3			
						14.1	4.3			
						16	5.8			
						15.7	6.8			
						14.4	7.7			
						14.1	7.7			
						14.3	4.7			
						15.3	6.4			
						16.2	4.7			
						16.7	5.3			
						15.9	3.6			
					Average	15.325	5.45			
					Standard Deviation	0.890479952	1.414534938			
1080		2.0	-11.5	11.3		13.3	3.3		X	
			348.5			14.2	4			

						15.3	6.3			
						15	5.4			
						16.2	5.4			
						15	6.8			
						16.3	6.7			
						13.7	3.8			
						14.1	4.2			
						12.9	3.2			
						13.8	3.5			
						13.9	3.4			
					Average	14.475	4.666666667			
					Standard Deviation	1.087219138	1.375984496			
1081		3.3	-11.7	12.3		16.4	5.8		X	
			348.3			16.7	6.7			
						17.7	9			
						17.9	8.4			
						16.6	6.3			
						14.8	4.8			
						15.3	5.5			
						14.3	5.4			
						14.6	4.6			
						15.1	2.2			
						15.7	5.7			
						16	5.3			
					Average	15.925	5.808333333			
					Standard Deviation	1.172507027	1.757300788			
1082		7.1	-16.3	6		14.6	5		X	
			344.7			15.2	5.7			
						15.3	5			
						14.7	4.9			
						14.6	4.7			
						14.1	4.6			
						13.3	3.7			
						13.8	4.9			

						13.8	4.3			
						14.5	5.1			
						15.3	6.2			
						14.9	5.3			
					Average	14.50833333	4.95			
					Standard Deviation	0.644498866	0.636038878			
1083		11.5	-13.5	6.3		15.1	3.6		X	
			346.5			14.1	3.9			
		VOLCANIC ?				14.1	3.1			
						13.4	2.1			
						12.9	2.8			
						11	1.9			
						12.9	2.8			
						14.1	3.1			
						15.8	4.1			
						15	3.5			
						14	3.1			
						13.1	3			
					Average	13.79166667	3.083333333			
					Standard Deviation	1.263083049	0.652036437			
1084		14.7	-14.3	12.6		11.7	2.7		X	
			345.7			11.6	2.5			
						11.5	2.9			
						10	1.9			
						12	2.1			
						12.3	2.1			
						12.4	2.6			
						13	2.3			
						13	2.5			
						12.1	3			
						11.2	2.3			
						13	3.3			
					Average	11.98333333	2.516666667			
					Standard Deviation	0.873689495	0.41083802			

1085		15.9	-12.3	5.7		15.6	4.5		X	
			347.7			14.5	4.1			
						14.4	3.8			
						16	5.5			
						16.2	5.2			
						16.3	5.7			
						16.5	4.5			
						16.2	4.9			
						16.1	5			
						15.7	5			
						14.6	3.6			
						14.1	4			
				Average		15.51666667	4.65			
				Standard Deviation		0.866375242	0.676219437			
1086	Timocharis	26.7	-13.0	32.1		13.6	3.4		X	
			347.0			12.9	3.6			
						11.8	3.4			
						13	3.6			
						13.4	3.3			
						12.5	3.2			
						13.8	3.9			
						14.5	3.8			
						10.6	2.9			
						12.5	3.9			
						12.4	3.3			
						13.3	3.7			
				Average		12.85833333	3.5			
				Standard Deviation		1.014851833	0.304511531			
1087		24.8	-15.3	7		17.6	6.5		X	
			344.7			17.1	5.8			
						17.5	6.3			
						18	7.3			

						17	6			
						16.9	4.7			
						17.6	6.8			
						17.5	6.9			
						17.8	6.6			
						17.2	5.9			
						17.3	6.1			
						17.6	7			
					Average	17.425	6.325			
					Standard Deviation	0.330633002	0.695603074			
1088		32.9	-15.9	9.5		15.8	2.9		X	
			344.1			15.9	2.3			
						16.4	1.8			
						16.8	1.9			
						16.9	1.2			
						16.3	0.9			
						15.8	3.3			
						15.9	2.7			
						15.7	2.8			
						16	2.4			
						15.9	2.3			
						16.1	1.8			
					Average	16.125	2.191666667			
					Standard Deviation	0.395715692	0.705121954			
1089		31.2	-14.7	5.7		16.8	3.5			
			345.3			17	4.2		X	
						16.9	3.1			
						16.9	3.6			
						17.3	3.6			
						17	3.5			
						16.8	2.1			
						17	3.6			
						16.9	4.1			
						16.9	3.9			

						16.8	3.7			
						16.9	2.8			
					Average	16.93333333	3.475			
					Standard Deviation	0.137068883	0.578595478			
1090		39.6	-12.2	9.5		14.9	1.6		X	
			347.8			14.7	1.7			
						14.9	1.4			
						15.7	0.9			
						15.8	1.8			
						16.4	1.6			
						15.6	0.9			
						16.1	1.6			
						15.2	1.7			
						15	1.6			
						15.2	1.6			
						15.1	1.4			
					Average	15.38333333	1.483333333			
					Standard Deviation	0.530580014	0.294906251			
1091		42.9	-10.2	9		15.3	1.7		X	
			349.8			15.7	1.8			
						15.8	1.9			
						15.6	1.6			
						15.5	1.4			
						15.7	2.2			
						16.3	1.6			
						14.9	0.7			
						16	1.8			
						15.9	1.4			
						15.9	1.7			
						15.3	1.5			
					Average	15.65833333	1.608333333			
					Standard Deviation	0.372847357	0.362963392			
1092		46.4	-15.2	11.5		15.2	2.2		X	

			344.8			15	2.1			
						15.7	2			
						16	2			
						16.6	2.3			
						17.2	3.1			
						17.2	5.4			
						16.6	3			
						16.3	2.1			
						17	2.3			
						14	2.3			
						15.5	2.1			
					Average	16.025	2.575			
					Standard Deviation	0.984539579	0.96023198			
1093		49.5	-14.3	10.3		13.2	0.8		X	
			345.7			13.2	0.6			
						13.4	0.7			
						14.3	0.6			
						15.2	0.8			
						14.6	0.8			
						13.9	0.3			
						15.1	0.9			
						14.8	1			
						13.8	0.8			
						13	0.5			
						12.4	0.7			
					Average	13.90833333	0.708333333			
					Standard Deviation	0.898947196	0.188092498			
1094		45.4	-19.7	5.7		16.1	2.2		X	
			340.3			16.5	2.8			
						16.8	1.4			
						17.4	2.5			
						16.7	2			
						16.7	1.7			
						16.7	2.4			

						16.3	2.4			
						16.1	2			
						15.9	1.9			
						16.8	1.4			
						15.2	1			
					Average	16.43333333	1.975			
					Standard Deviation	0.561383572	0.527644853			
1095		48.4	-18.1	7.5		10	1	X		
			341.9			7.3	1.2			
						7	0.9			
						9.6	1.7			
						12	1.9			
						11.7	2.4			
						12.5	2.4			
						10.2	1.6			
						7.6	1			
						10.1	1.6			
						10.6	1.3			
						10.2	1.6			
					Average	9.9	1.55			
					Standard Deviation	1.801009818	0.505425114			
1096		51.4	-14.9	8.3		9.5	0.8	X		
			345.1			7.6	0.6			
						8.1	0.4			
						10.3	1.2			
						9.4	1.1			
						10.4	1.6			
						11.4	2.1			
						0.7	1.3			
						11.4	1.4			
						11.4	1.3			
						10.5	1.7			
						10.6	1.4			
					Average	9.275	1.241666667			

				Standard Deviation	2.968049559	0.473782331			
1097	53.0	-16.0	10.3		7.2	0.7	X		
		344.0			8.3	0.8			
					8.3	0.5			
					10	0.6			
					10.3	1.3			
					8.2	0.9			
					9.7	1.3			
					11	1.2			
					10	1.4			
					9.1	1.3			
					6.4	0.5			
					7	0.6			
				Average	8.791666667	0.925			
				Standard Deviation	1.455059095	0.351942661			
1098	54.4	-11.0	7.7		10	0.8	X		
		349.0			9.4	0.6			
					9.4	0.6			
					10.2	1.1			
					10.6	1.3			
					11.8	1.7			
					10.1	1.1			
					10.2	1.3			
					10.1	0.9			
					10.5	1.1			
					8.6	0.5			
					8.3	1.1			
				Average	9.933333333	1.008333333			
				Standard Deviation	0.927688558	0.347610894			
1099	55.6	-19.7	6		10.8	1.2	X		
		340.3			9.4	0.7			
					9.3	0.8			
					11.4	1.1			

						11.2	1.4			
						9.8	0.7			
						10.6	1			
						10.1	0.7			
						11	1.4			
						8.8	0.7			
						10	0.8			
						11.7	0.9			
					Average	10.34166667	0.95			
					Standard Deviation	0.915977703	0.267989145			
1100		64.0	-16.7	5.8		9.5	0.7		X	
			343.3			7.3	0.3			
						9.3	0.3			
						12.1	2			
						14.1	2.1			
						16.7	3.9			
						17.2	4.7			
						10.4	0.9			
						9.7	0.6			
						7.8	0.2			
						9.7	0.5			
						9.3	0.7			
					Average	11.09166667	1.408333333			
					Standard Deviation	3.266206678	1.493293087			
1101		67.4	-15.6	22.1		5.1	0.1		X	
			344.4			4.6	0.2			
						4	0.1			
						4.1	0.2			
						6.4	0.4			
						9.3	0.9			
						10.9	0.8			
						9.4	1			
						11.7	0.8			
						16.9	6.6			

						12.7	2.9			
						8.2	0.9			
					Average	8.608333333	1.241666667			
					Standard Deviation	4.004419907	1.849549495			
1102		69.3	-18.2	11.6		3.8	1	X		
			341.8			3.6	0.3			
						3.4	0.3			
						3.3	0.3			
						11.3	1.4			
						6.5	0.2			
						9.3	0.8			
						11.9	0.9			
						6.6	0.3			
						8.8	0.4			
						5.8	0.2			
						5.2	0.2			
					Average	6.625	0.525			
					Standard Deviation	3.058260052	0.398006396			
1103		69.2	-5.9	6.3		3.1	0.1	X		
			354.1			2.6	0.1			
						1.5	0			
						12	3.4			
						12.2	3.4			
						10.2	3			
						13.7	2.7			
						8.5	1.6			
						7	0.6			
						6	0.3			
						5.2	0.4			
						4.4	0.1			
					Average	7.2	1.308333333			
					Standard Deviation	4.098336691	1.416434919			
1104	Timaeus	62.7	-0.2	31.6		6.8	0.4	X		

			359.8			10.2	0.7			
						12.3	1.8			
						14.5	3.6			
						12.8	1.5			
						9.7	0.7			
						7.9	0.4			
						8.2	0.3			
						7.7	0.3			
						6.5	0.3			
						8.9	0.7			
						9.4	1			
					Average	9.575	0.975			
					Standard Deviation	2.492579898	0.958336627			
1105		55.0	-1.8	11		8.4	0.4		X	
			358.2			8.4	0.5			
						9.6	0.8			
to some Highland but mostly in Highland Area)						10.2	0.5			
						10.1	1			
						11.3	1.1			
						11.8	1.1			
						10.3	0.9			
						10.5	0.9			
						9.6	0.7			
						9.8	0.7			
						8.8	0.5			
					Average	9.9	0.758333333			
					Standard Deviation	1.049675274	0.246644143			
1106		54.4	-4.6	8.3		7.9	0.5		X	
			355.4			8.6	0.5			
						8.4	0.5			
						6.8	0.3			
						40.9	0.9			
						9.8	1			
						11.3	0.8			

						7	0.4			
						7.4	0.5			
						7.9	0.5			
						8.2	0.6			
						10.3	1.1			
					Average	11.20833333	0.633333333			
					Standard Deviation	9.446929115	0.253460893			
1107		51.5	-4.2	10.8		6.7	0.3	X		
			355.8			7.1	0.4			
						6.6	0.3			
						8.7	0.7			
						9.9	0.8			
						9.8	0.9			
						8.7	0.5			
						9.6	0.8			
						10.7	0.8			
						7.8	0.3			
						7.2	0.2			
						8	0.3			
					Average	8.4	0.525			
					Standard Deviation	1.378404875	0.256284643			
1108		51.2	-0.1	12		8.4	0.6	X		
			359.9			6.1	0.5			
						10.4	1			
						12.8	1.6			
						13.3	1.5			
						11.5	1.1			
						10.1	1.2			
						8.7	0.6			
						7.6	0.6			
						8.9	0.6			
						7.5	0.8			
						8.6	0.5			
					Average	9.491666667	0.883333333			

				Standard Deviation	2.188589555	0.390415474			
1109		48.9	-4.4	8.1	9.8	1.5	X		
			355.6		9.7	1.6			
					10.5	1.8			
					11.2	2.6			
					12.1	2.4			
					12.5	2.8			
					13.4	2.7			
					12.1	2.7			
					10.8	1.9			
					10.3	1.8			
					10.4	1.4			
					9.8	1.3			
				Average	11.05	2.041666667			
				Standard Deviation	1.211685528	0.561585958			
1110	Piazz-Smyth	41.8	-3.1	13.1	12.6	1.5	X		
			356.9		13.9	1.8			
					14.9	1.5			
					16.2	3.4			
					17.3	2.3			
					14.8	1.6			
					14.7	1.6			
					14	1.2			
					12	0.9			
					12.6	1.4			
					12.6	1.2			
					16.6	2.9			
				Average	14.35	1.775			
				Standard Deviation	1.728109845	0.736237363			
1111	Kirch	39.1	-5.5	11.8	14.3	1.2	X		
			354.5		15	1.5			
					14.8	1.7			
					15	1.7			

						16	2			
						16.1	2.2			
						15.9	1			
						15.2	0.9			
						15.1	1.1			
						14.6	1.6			
						14.6	1.4			
						14.3	1.4			
					Average	15.075	1.475			
					Standard Deviation	0.62830942	0.393411651			
1112		31.6	-1.4	8.1		13.6	2.3		X	
			358.6			13.8	2.3			
						13.3	2.4			
						14.1	3.1			
						14	3.4			
						14.6	2.5			
						13.6	3.1			
						14.1	2.5			
						14.3	2.8			
						13.8	2.9			
						13.6	2.4			
						13.3	2.5			
					Average	13.84166667	2.683333333			
					Standard Deviation	0.394181161	0.366391081			
1113		32.6	-7.0	6		16.5	3		X	
			353.0			16.2	3.6			
						16.7	4.2			
						17	4.4			
						16.5	4			
						16.5	3.5			
						16.6	3.6			
						16.6	4.1			
						16.6	3.9			
						16.2	3.6			

						16.2	3.8			
						15.9	2.9			
					Average	16.45833333	3.716666667			
					Standard Deviation	0.29063671	0.450924975			
1114	Bancroft	28.0	-6.3	13		12.4	3.1		X	
			353.7			12.7	2.9			
						12.7	3.1			
						13.5	3.5			
						12.9	3.9			
cut slightly into Highland but mostly Mare)						12.5	3.7			
						12.9	3.2			
						11.7	2.3			
						11.7	2.2			
						12.3	2.5			
						12.4	2.7			
						12.1	3.1			
					Average	12.48333333	3.016666667			
					Standard Deviation	0.513160144	0.530580014			
1115		27.3	-9.4	10.8		15.8	4.7		X	
			350.6			14.5	3.9			
						13.9	3.3			
						14.1	4.1			
						13.8	4.2			
						14.9	4.1			
						14.8	5.2			
						13.3	4.5			
						14.8	3.9			
						15.2	3.8			
						13.5	3.4			
						10.5	2.7			
					Average	14.09166667	3.983333333			
					Standard Deviation	1.347359933	0.663096501			
1116		24.2	-7.8	7.9		13.6	4.1		X	

			352.2			13.2	3.1			
						12	3.3			
						12	3			
						9.8	2.8			
						9.2	2.5			
						12.2	3.1			
						12.6	4			
						13.8	3.8			
						14.1	4.1			
						13.3	3.5			
						13.2	3.7			
					Average	12.41666667	3.416666667			
					Standard Deviation	1.530795	0.532290647			
1117		21.5	-0.6	7.3		10.3	0.7		X	
			359.4			11.3	0.9			
						8.6	0.9			
						7.7	0.8			
						7.6	0.8			
						7.2	0.8			
						8.2	1			
						9.8	1			
						10	1.1			
						9.4	1			
						10.6	1.2			
						10	0.9			
					Average	9.225	0.925			
					Standard Deviation	1.328789606	0.142222617			
1118		19.5	-3.6	23		10.5	1.8		X	
			356.4			8.5	1.2			
						8.8	0.9			
P BUT IN CLEMENTINE DATA SET						10.4	1.6			
						12.4	1.8			
						12	1.4			
						12.6	1.7			

						12.4	1.8			
						12	2.5			
						10.8	2.3			
						14.8	2.1			
						11.7	2			
					Average	11.40833333	1.758333333			
					Standard Deviation	1.735961004	0.450168319			
1119		17.5	-3.3	7.6		9.5	1.2	X		
			356.7			8.8	1.3			
						11.1	1.4			
						10.4	1.2			
						11.1	1.7			
						10.4	1.4			
						10	1.5			
						9.1	1.3			
						9.5	1.3			
						11.2	1.8			
						10.4	1.4			
						8.6	1.6			
					Average	10.00833333	1.425			
					Standard Deviation	0.907001387	0.191287504			
1120		16.0	-8.6	8.1		12.2	3.1	X		
			351.4			12.9	2.6			
						12.4	3.9			
						11.2	2.3			
						10.2	2.2			
						11.2	2.2			
						12.5	2.1			
						12	2.5			
						12	2			
						10.8	2.7			
						12.8	3.2			
						12.3	2.2			
					Average	11.875	2.583333333			

				Standard Deviation		0.8400487	0.563807403			
1121		13.9	-5.0			11.1	2.4		X	
			355.0			10.2	1.5			
						6.5	0.8			
						7.3	1			
						9.1	1.6			
						9.8	1.8			
						10.3	2			
						11.5	2.8			
						13.7	3.4			
						13.2	3			
						10.3	1.6			
						12.2	2.2			
				Average		10.43333333	2.008333333			
				Standard Deviation		2.144478463	0.789082705			
1122		12.2	-4.7	9.2		12.1	8.7		X	
			355.3			17.8	9.2			
						16.6	8.8			
						16	7.6			
						17	8.4			
						17.7	9.1			
						16.1	8.7			
						16.8	9.1			
						17.6	9			
						18	10.1			
						17.9	10.2			
						17.8	9.8			
				Average		16.78333333	9.058333333			
				Standard Deviation		1.634755102	0.729206709			
1123		8.7	-3.0	9.9		11.8	2.1		X	
			357.0			11.5	2.2			
						13	1.9			
						12.8	2.2			

						12.8	2.4			
						12.5	2.3			
						11.8	2.1			
						10.8	2			
						11.1	1.7			
						11.2	1.9			
						10.6	2.3			
						10.7	1.8			
					Average	11.71666667	2.075			
					Standard Deviation	0.875768061	0.217944947			
1124	Bode	6.7	-2.4	19		10.1	1.5	X		
			357.6			9.7	1.5			
						9.1	1.4			
						9.4	1.4			
						10.2	1.2			
						9.1	1.5			
						8.2	1.4			
						7.6	1.1			
						10	1.6			
						9.5	1.4			
						8.6	1			
						8.5	1.3			
					Average	9.166666667	1.358333333			
					Standard Deviation	0.811657489	0.178164037			
1125		14.0	4.7	6.5		13.6	3	X		
						11.6	2.7			
						13.8	2.7			
into some Highland material but mostly Mare)						14.1	4.3			
						11.1	1.6			
						11.1	2.5			
						12.1	2.7			
						11.9	2.2			
						12.6	3.2			
						12.5	2.5			

						13.7	3.3			
						12.5	2.7			
					Average	12.55	2.783333333			
					Standard Deviation	1.05010822	0.654818966			
1126		23.6	4.6	15		10	1	X		
						11	0.8			
						9.8	0.9			
						5.4	0.6			
						7.7	0.8			
						8.9	0.8			
						7.2	0.8			
						9.9	0.8			
						10	1.1			
						8.1	0.9			
						9.1	1.3			
						10.1	1			
					Average	8.933333333	0.9			
					Standard Deviation	1.57614797	0.180906807			
1127	Trouvelot ?	49.2	6.0	8.2		9.1	0.6	X		
						7.9	0.6			
						8.4	0.6			
						10.1	0.8			
						10.4	1.7			
						11	0.8			
						11	1.3			
						10.5	1.2			
						9.4	0.5			
						9.3	0.8			
						8.8	0.6			
						8.9	0.6			
					Average	9.566666667	0.841666667			
					Standard Deviation	1.020101005	0.367938565			
1128		45.5	17.5	7.5		9.2	0.8	X		

						9.1	0.6			
						7.1	0.8			
line situation but more in Highland Area.)						9.6	0.8			
						9.2	0.7			
						11.7	1.1			
						12.7	1.2			
						10.2	1.2			
						12.5	1.2			
						11.2	1.1			
						9.2	0.8			
						9.2	0.9			
					Average	10.075	0.933333333			
					Standard Deviation	1.645448267	0.214617348			
1129		17.1	14.2	5.5		17	5.1	X		
						16.9	5.1			
						16.9	4.7			
						16.7	5.2			
						16.8	3.6			
						15.1	1.5			
						16.3	2.5			
						17.3	4.9			
						16.8	3.7			
						16.6	4.6			
						16.5	3.8			
						16.8	4.3			
					Average	16.64166667	4.083333333			
					Standard Deviation	0.546822779	1.14083967			
1130	Sulpicius Gallus	19.6	11.7	12		14.2	5.2	X		
						14.7	6.2			
						17.7	8.7			
						18	11.2			
						14.8	5.5			
						13.6	4.6			
						9.4	2.9			

						13	3.8			
						13.7	5.1			
						13.9	4.5			
						13.9	5.5			
						12.8	4.2			
					Average	14.14166667	5.616666667			
					Standard Deviation	2.225659589	2.265485432			
1131		24.7	16.3	7.8		15.9	3.4		X	
						16.1	3.5			
						16.3	2.9			
						16.4	3.3			
						16.7	3.5			
						16.3	3.3			
						16.9	3			
						16.7	3.1			
						16.1	3.2			
						15.9	3.2			
						16.2	3.7			
						16.1	3.5			
					Average	16.3	3.3			
					Standard Deviation	0.321926022	0.233549683			
1132	Carrel	10.7	26.7	15.8		17.1	7.7		X	
						17.2	7.5			
						17.3	7			
						17.3	7			
						17.3	6.8			
						17	6.3			
						15.9	3.5			
						16.1	3.4			
						16.2	4			
						17.1	7.5			
						16.8	5.9			
						17.3	7.9			
					Average	16.88333333	6.208333333			

				Standard Deviation	0.518447566	1.657741253			
1133	Sinas	8.8	31.6	12.3	17.8	11		X	
					17.7	9.6			
					17.3	8.3			
					17.1	8.3			
					17.2	9.2			
					17.3	8.6			
					18.5	10.8			
					17.6	9.6			
					17.9	11.3			
					18.2	11			
					17.9	10.5			
					17.7	10.4			
				Average	17.68333333	9.883333333			
				Standard Deviation	0.417423555	1.098621726			
1134	Ross	11.7	21.8	24.5	17	10.6		X	
					15.2	6.2			
					18.3	12.9			
					18	12			
					18.5	14.2			
					16.7	7.2			
					17.5	12.2			
					18.5	13.2			
					17.6	12.5			
					17.3	12.7			
					17.2	1.3			
					16.7	9.6			
				Average	17.375	10.38333333			
				Standard Deviation	0.937234811	3.75858613			
1135	Cauchy	9.5	38.6	11.5	14.6	4.4		X	
					16.3	6.3			
					16.8	6.8			
					16.5	6.7			

						17.1	6.9			
						12.8	3.3			
						10.3	3.2			
						10.8	3.6			
						15.7	4.7			
						15.4	4			
						15.6	3.4			
						15.7	5.7			
					Average	14.8	4.916666667			
					Standard Deviation	2.283139784	1.475147656			
1136		14.3	36.8	6.5		17.5	8.1		X	
						17.8	8.6			
						17.5	6.8			
						17.8	7.7			
						17.7	7.4			
						17.7	8.7			
						17.9	8			
						16.3	3.5			
						17.3	6.9			
						17.6	8.2			
						17.6	7.7			
						18	8.7			
					Average	17.55833333	7.525			
					Standard Deviation	0.439955232	1.418145396			
Analysis of Lunar Southern Hemisphere commences								Lunar Southern Hemisphere Data commences		
1137	Theon Senior	-2.3	3.0	8.1		8.9	1.2		X	
						7.5	1.2			
						8.8	1			
						7.9	1.1			
						7.6	0.9			
						8.1	1			
						8	1.2			
						8.1	1.3			

						8.8	1.5			
						8.3	1.5			
						8.8	1.2			
						8.5	1.1			
					Average	8.275	1.183333333			
					Standard Deviation	0.486406115	0.185047087			
1138	Horrocks	-4.0	5.9	28.7		6.3	0.9	X		
						6.7	0.9			
						4.5	0.9			
						6.5	1			
						6.7	0.7			
						6.6	0.9			
						4.7	0.9			
						5.5	0.7			
						4.5	0.5			
						5.8	0.6			
						4	0.6			
						4.8	0.6			
					Average	5.55	0.766666667			
					Standard Deviation	1.007697646	0.166969422			
1139		-7.0	2.2	11.2		7	0.6	X		
						6.7	0.7			
						7	0.7			
						6.5	0.9			
						6.5	1			
						6.1	0.7			
						7.4	0.8			
						7.3	0.5			
						7	0.8			
						7	0.7			
						6.8	0.8			
						6.9	0.7			
					Average	6.85	0.741666667			
					Standard Deviation	0.360555128	0.131137217			

1140	Hind	-7.9	7.3	29		4.7	0.7	X		
						4.9	0.8			
						4.8	0.6			
						4.1	0.6			
						3.7	0.5			
						3.8	0.7			
						5.3	0.8			
						5.4	0.8			
						3.9	0.9			
						4.6	0.7			
						5.2	0.6			
						4	0.7			
					Average	4.533333333	0.7			
					Standard Deviation	0.612496135	0.112815215			
1141		-9.4	1.9	14.4		6.3	0.8	X		
						5.9	0.8			
						6.8	1.1			
						6.9	0.8			
						7.3	1			
						6.1	0.8			
						6.4	1			
						8.2	1.1			
						7.5	0.9			
						8.2	1.3			
						7.7	1.3			
						8.2	1.3			
					Average	7.125	1.016666667			
					Standard Deviation	0.846516928	0.203752672			
1142		-17.0	7.7	12.3		4.7	0.6	X		
						6.9	1			
						5.8	0.9			
						5.2	0.7			
						4.1	0.6			

						4.3	0.6			
						4.9	0.5			
						3.5	0.5			
						4.8	0.8			
						4.3	0.6			
						5	0.7			
						3.4	0.5			
					Average	4.741666667	0.666666667			
					Standard Deviation	0.964325797	0.161432977			
1143		-13.0	6.4	13.7		6.5	1.1	X		
						5.9	0.9			
						6.9	1			
						5.9	0.9			
						5.6	0.7			
						5.8	0.7			
						5.9	0.9			
						6.2	0.9			
						6.5	0.9			
						6	1			
						6	1.2			
						5.7	0.7			
					Average	6.075	0.908333333			
					Standard Deviation	0.381682876	0.156427929			
1144		-17.0	2.5	9.8		6.2	0.8	X		
						4.8	0.7			
						4.8	0.6			
						5.3	0.6			
						6.3	0.9			
						5.8	1			
						8.3	1			
						6.3	0.8			
						7.1	1.1			
						6.6	1.3			
						6.1	0.8			

						6.7	0.9			
					Average	6.191666667	0.875			
					Standard Deviation	0.97929319	0.205049883			
1145		-17.6	4.4	11		5.4	0.6	X		
						3	0.5			
						2.6	0.4			
						4.4	0.4			
						5	0.5			
						4.9	0.6			
						5	0.6			
						5.8	0.5			
						5	0.6			
						5.4	0.6			
						6.2	0.8			
						6.8	0.6			
					Average	4.958333333	0.558333333			
					Standard Deviation	1.196554397	0.108362467			
1146		-18.5	1.3	30.8		7	0.9	X		
						6.3	0.7			
						5.7	0.7			
						6.4	0.7			
						6.8	0.5			
						6.6	0.6			
						6.9	0.5			
						7.2	0.7			
						5.6	0.8			
						7.7	0.7			
						7.1	0.6			
						6.9	0.7			
					Average	6.683333333	0.675			
					Standard Deviation	0.607279078	0.113818037			
1147		-20.8	10.0	15.9		5.6	0.7	X		
						7.1	0.7			

						7.4	0.7			
						5	0.5			
						5.5	0.8			
						4.5	0.6			
						2.7	0.7			
						3.8	0.6			
						4	0.8			
						5.4	0.9			
						5.1	0.8			
						6.4	1			
					Average	5.208333333	0.733333333			
					Standard Deviation	1.360787428	0.137068883			
1148		-26.2	0.7	13		5.9	0.7	X		
						4.4	0.5			
						5.4	0.5			
						4.4	0.5			
						3.5	0.4			
						4.6	0.4			
						4.6	0.5			
						5.1	0.5			
						5.7	0.5			
						4.1	0.3			
						4.3	0.4			
						5.1	0.4			
					Average	4.758333333	0.466666667			
					Standard Deviation	0.698645876	0.098473193			
1149		-23.6	2.2	11.8		5.1	0.6	X		
						5.1	0.6			
						5.2	0.5			
						4.5	0.5			
						5.9	0.5			
						5.4	0.5			
						5	0.6			
						5.8	0.5			

						4.9	0.5			
						5	0.5			
						5.9	0.6			
						3.2	0.4			
					Average	5.083333333	0.525			
					Standard Deviation	0.732161598	0.062158156			
1150		-29.7	9.1	17		6	0.6	X		
						6.9	0.6			
						3.8	0.5			
						3.5	0.5			
						4.1	0.7			
						3.9	0.2			
						4.4	0.5			
						4.5	0.3			
						6.4	0.5			
						7.7	1			
						5	0.3			
						3.6	0.3			
					Average	4.983333333	0.5			
					Standard Deviation	1.418599395	0.217422923			
1151		-32.8	6.5	13.2		4.6	0.9	X		
						5.1	0.4			
						4.1	0.3			
						2.9	0.4			
						3.5	0.4			
						4.2	0.5			
						3	0.4			
						5.7	0.4			
						1.6	0.4			
						5.1	0.6			
						4.3	0.4			
						5.4	0.6			
					Average	4.125	0.475			
					Standard Deviation	1.198578704	0.160255478			

1152		-35.4	5.5	9.5		5.6	0.58	X		
						6.2	0.7			
						5.3	0.5			
						3.8	0.3			
						3.7	0.3			
						7.2	0.7			
						2.6	0.3			
						4	0.3			
						5.1	0.5			
						6.2	0.6			
						5.7	0.5			
						5.6	0.5			
					Average	5.083333333	0.481666667			
					Standard Deviation	1.308596287	0.151467568			
1153		-32.4	0.7	10.4		9.7	0.9	X		
						7.6	1			
						6.6	0.5			
						8.7	0.4			
						10.4	0.7			
						12.3	1.3			
						13	1.1			
						11.6	1.1			
						10.6	0.6			
						8.2	0.5			
						9	0.8			
						7.1	0.6			
					Average	9.566666667	0.791666667			
					Standard Deviation	2.064123557	0.287491765			
1154		-36.5	0.5	12.2		5.6	0.5	X		
						6.3	0.7			
						4.2	0.3			
						7.7	0.9			
						5	0.6			

						4.1	0.5			
						4.7	0.6			
						5.8	0.6			
						6.8	0.7			
						5.6	0.5			
						5.3	0.8			
						3.9	0.4			
					Average	5.41666667	0.59166667			
					Standard Deviation	1.141636253	0.167648622			
1155		-39.5	4.1	18.5		7.2	0.6	X		
						7	0.5			
						3.5	0.3			
						3.1	0.3			
						5.4	0.3			
						5.4	0.4			
						6.1	0.6			
						7.2	0.6			
						7.4	4.1			
						3.7	0.2			
						2.7	0.3			
						4.9	0.4			
					Average	5.3	0.71666667			
					Standard Deviation	1.725214084	1.074356749			
1156		-36.6	9.6	12		7.5	0.7	X		
						3.9	0.2			
						3.3	0.3			
						3.1	0.4			
						3.5	0.3			
						5.2	0.4			
						5.9	0.8			
						5.5	0.6			
						6.4	0.8			
						6.8	1.1			
						6.3	0.5			

						4.4	0.3			
					Average	5.15	0.533333333			
					Standard Deviation	1.485995228	0.27080128			
1157		-42.7	4.9	17.3		3.9	0.2	X		
						7	0.4			
						8.1	0.6			
						3.9	0.4			
						6.1	0.5			
						3.7	0.2			
						2.2	0.2			
						1.7	0.2			
						4.4	0.4			
						7.6	0.7			
						3.9	0.3			
						6.2	0.4			
					Average	4.891666667	0.375			
					Standard Deviation	2.073406654	0.16583124			
1158		-43.8	9.6	13.2		6.6	0.3	X		
						5.3	0.4			
						7.2	0.3			
						3.5	0.2			
						5.6	0.2			
						3.2	0.3			
						4.9	0.3			
						5.5	0.43			
						5.3	0.5			
						8.5	1			
						7.5	0.7			
						4.8	0.4			
					Average	5.658333333	0.419166667			
					Standard Deviation	1.567544886	0.228928664			
1159		-45.9	10.0	30.6		6	0.4	X		
						7.2	0.5			

						7.3	0.4			
						8.9	0.5			
						6	0.4			
						4.8	0.4			
						5.3	0.4			
						4.9	0.2			
						4.9	0.8			
						5	0.4			
						7.4	0.7			
						7.6	0.6			
					Average	6.275	0.475			
					Standard Deviation	1.365233913	0.160255478			
1160		-46.5	4.8	11.5		3.8	0.4	X		
						12.8	2			
						4.6	0.5			
						3.9	0.5			
						4.6	0.5			
						2.3	0.2			
						2.8	0.3			
						5.9	1.3			
						4.8	0.4			
						3.9	0.4			
						3	0.3			
						3.1	0.3			
					Average	4.625	0.591666667			
					Standard Deviation	2.762122043	0.52476546			
1161		-48.6	8.4	12		6.7	0.7	X		
						2.5	0.2			
						4.5	0.3			
						4.6	0.3			
						5.1	0.5			
						4.8	0.5			
						4.3	0.4			
						3.3	0.2			

						0.2	0.5			
						5.8	0.5			
						4.6	0.4			
						4.3	0.3			
					Average	4.225	0.4			
					Standard Deviation	1.654264462	0.147709789			
1162		-51.5	0.8	27.7		7.2	0.6	X		
						10.2	1.1			
						11.6	1.8			
						5.6	0.4			
						6.2	0.7			
						5.1	0.9			
						4.1	0.7			
						3.1	0.5			
						4.4	0.7			
						2.8	0.7			
						5.4	0.5			
						5.4	0.7			
					Average	5.925	0.775			
					Standard Deviation	2.64441951	0.372033723			
1163		-57.4	4.7	11.1		2.3	0.2	X		
						2.3	0.1			
						7.7	0.7			
						7.5	1			
						4.7	0.5			
						3	0.3			
						2.6	0.2			
						3.5	0.3			
						4.5	0.4			
						4.9	0.5			
						3.7	0.3			
						2.5	0.3			
					Average	4.1	0.4			
					Standard Deviation	1.875681694	0.248632624			

1164		-52.7	5.8	16.1		3.6	0.4	X		
						7.6	0.5			
						8.1	0.7			
						11.4	1.1			
						4.3	0.4			
						4.3	0.3			
						2.7	0.3			
						2.2	0.2			
						2.7	0.2			
						6.9	0.5			
						3.4	0.2			
						2.6	0.1			
					Average	4.983333333	0.408333333			
					Standard Deviation	2.870170515	0.274551977			
1165		-59.4	6.3	25.3		6.9	0.6	X		
						8.4	0.7			
						6.9	0.9			
						8.3	0.8			
						4	0.3			
						4.2	0.3			
						2.4	0.4			
						2.1	0.2			
						2	0.2			
						2.9	0.2			
						1.6	0.2			
						3.3	0.2			
					Average	4.416666667	0.416666667			
					Standard Deviation	2.527245476	0.262274434			
1166		-51.4	7.8	16.6		8.3	1.1	X		
						9.5	1.1			
						8.8	1.1			
						7.8	0.7			
						4	0.3			

						3.6	0.3			
						3.2	0.4			
						2.8	0.3			
						2.6	0.4			
						3.6	0.3			
						7.1	0.8			
						5.2	0.4			
					Average	5.541666667	0.6			
					Standard Deviation	2.578039542	0.341121146			
1167		-58.7	1.3	12.1		5.7	0.6	X		
						6.9	0.7			
						9.9	1.1			
						6.2	0.4			
						2.3	0.4			
						2.5	0.3			
						1.7	0.3			
						0.2	0.2			
						0.4	0.2			
						5.8	0.7			
						5.4	0.8			
						6	0.8			
					Average	4.416666667	0.541666667			
					Standard Deviation	2.952605424	0.284312035			
1168		-62.1	7.8	29		9.4	0.9	X		
						8	1.3			
						8.9	2.6			
						5	0.2			
						3.7	0.2			
						1.8	0.3			
						1.8	0.2			
						3.8	0.3			
						4.3	0.2			
						5.2	0.7			
						6.9	0.4			

						16.5	9.5			
					Average	6.275	1.4			
					Standard Deviation	4.090593422	2.645407685			
1169		-61.6	0.7	25.2		7	0.4	X		
						9	1.1			
						5.6	0.5			
						7.3	0.3			
						1.8	0.3			
						3.2	0.4			
						4.2	0.5			
						0.4	0.2			
						0.1	0.2			
						5.9	0.7			
						6.1	0.5			
						2.7	0.3			
					Average	4.441666667	0.45			
					Standard Deviation	2.836597941	0.250454133			
1170		-69.2	4.4	6.3		5.7	1	X		
						5.4	0.5			
						7.7	0.9			
						3	0.2			
						5.2	0.5			
						3.6	0.3			
						7.1	0.3			
						1.2	0.2			
						2.5	0.1			
						19.1	11.7			
						3.3	0.3			
						1.7	0.1			
					Average	5.458333333	1.341666667			
					Standard Deviation	4.758811604	3.274823613			
1171		-63.8	8.7	6.3		13.1	2.6	X		
						11.6	2.1			

						11.7	2			
						8.6	0.5			
						2.6	0.2			
						2	0.1			
						2.2	0.2			
						4.5	0.3			
						4.9	0.4			
						11	2.5			
						13.3	3.9			
						15	4.6			
					Average	8.375	1.616666667			
					Standard Deviation	4.843763563	1.567182378			
1172		-65.0	6.9	8.9		3.6	0.4	X		
						2.2	0.2			
						2.8	0.4			
						3	0.3			
						2.7	0.2			
						1.4	0.1			
						3.4	0.2			
						4.5	0.4			
						4.4	0.6			
						5	0.5			
						1.5	0.2			
						2	0.1			
					Average	3.041666667	0.3			
					Standard Deviation	1.178950483	0.159544807			
1173		-68.0	13.3	12.1		8.7	1	X		
						5.4	0.3			
						7.4	1			
						1	0.1			
						9.5	1.5			
						5.6	0.3			
						2.7	0.2			
						6.3	0.5			

						6.8	0.6			
						8.2	0.7			
						8.2	0.7			
						8	1.3			
					Average	6.483333333	0.683333333			
					Standard Deviation	2.513900748	0.442787315			
1174		-63.2	18.5	13		5.9	0.4	X		
						7.7	0.7			
						5.4	0.4			
						4.2	0.3			
						3.4	0.4			
						2.9	0.5			
						3.2	0.2			
						3.9	0.2			
						2.2	0.1			
						3.3	0.4			
						3.2	0.2			
						3.6	0.3			
					Average	4.075	0.341666667			
					Standard Deviation	1.536894744	0.162135372			
1175		-62.1	11.3	12.4		11.4	1.3	X		
						10.1	1			
						12.3	1.3			
						12.6	1.3			
						7.6	0.5			
						5	0.4			
						3.7	0.3			
						2.9	0.3			
						1	0.1			
						2.6	0.2			
						4.6	0.3			
						7.7	0.7			
					Average	6.791666667	0.641666667			
					Standard Deviation	4.062793113	0.46212618			

1176		-65.7	17.9	24.1		9.8	2.7	X		
						5.9	0.7			
						5.7	0.4			
						4.6	0.5			
						0.6	0.2			
						2.5	0.2			
						1.9	0.1			
						3.5	0.3			
						3.2	0.2			
						7.2	0.5			
						6.9	0.9			
						8	1.8			
					Average	4.983333333	0.708333333			
					Standard Deviation	2.741211853	0.779811555			
1177		-59.2	18.6	10		6.2	0.4	X		
						9.1	0.6			
						5.9	0.5			
						1.8	0.1			
						0.6	0.3			
						0.5	0.1			
						2.2	0.1			
						3.4	0.2			
						1.3	0.1			
						8.7	0.9			
						8.3	0.7			
						6.9	0.8			
					Average	4.575	0.4			
					Standard Deviation	3.289411387	0.295419578			
1178		-56.2	19.5	24.5		8	0.7	X		
						6.9	0.6			
						3.6	0.2			
						4	0.3			
						4.4	0.3			

						3.2	0.3			
						4.4	0.6			
						3.3	0.2			
						2.7	0.2			
						5.7	0.5			
						6.5	0.4			
						8	0.5			
					Average	5.058333333	0.4			
					Standard Deviation	1.892789348	0.175809815			
1179		-54.5	13.8	13.5		8.1	1	X		
						7.7	0.5			
						5.1	0.4			
						3.7	0.3			
						4.1	0.4			
						3.2	0.4			
						3.7	0.4			
						6.2	0.6			
						7.3	0.7			
						7.8	0.7			
						4.1	0.3			
						6.2	0.4			
					Average	5.6	0.508333333			
					Standard Deviation	1.83005216	0.206522433			
1180		-57.4	13.8	16.1		7.6	0.9	X		
						4.4	0.3			
						5.8	0.6			
						5.5	0.5			
						4.6	0.5			
						2.8	0.3			
						3.2	0.4			
						3.9	0.4			
						5.6	0.5			
						8.6	0.8			
						7.7	0.8			

						5.4	0.6			
					Average	5.425	0.55			
					Standard Deviation	1.810637758	0.197714211			
1181		-51.7	13.7	17		8.8	0.5	X		
						6.2	0.4			
						4.7	0.5			
						4.6	0.3			
						4	0.2			
						4.1	0.4			
						4	0.2			
						4.7	0.2			
						6.6	0.6			
						6.7	0.4			
						8.3	0.4			
						4	0.3			
					Average	5.558333333	0.366666667			
					Standard Deviation	1.722291462	0.130267789			
1182		-50.0	11.7	9.1		5.6	0.4	X		
						6	0.4			
						4.3	0.7			
						5.3	0.4			
						2.5	0.3			
						3	0.2			
						3.5	0.4			
						2.2	0.1			
						4.9	0.4			
						5.7	0.4			
						3.2	0.3			
						3	0.4			
					Average	4.1	0.366666667			
					Standard Deviation	1.358475081	0.143548113			
1183		-48.2	13.3	16.1		6.9	0.6	X		
						4.6	0.4			

					5.1	0.5			
					6.4	0.7			
					4.2	0.3			
					5.6	0.3			
					5.2	0.4			
					5.5	0.4			
					6.8	0.7			
					6.9	0.6			
					7.3	0.5			
					5	0.4			
				Average	5.79166667	0.48333333			
				Standard Deviation	1.029084618	0.140345893			
1184		-45.2	19.5	15.5	6.3	0.6	X		
					6.6	1			
					4.5	0.7			
					7.8	0.8			
					5.2	0.3			
					3.3	0.5			
					4.8	0.4			
					6.3	0.5			
					5.2	0.6			
					6.1	0.5			
					7.7	0.8			
					5.6	0.6			
				Average	5.78333333	0.60833333			
				Standard Deviation	1.298133859	0.192865159			
1185		-43.2	19.7	10.8	9.2	0.9	X		
					8.1	0.9			
					7.8	1.1			
					7.6	0.7			
					5.4	0.5			
					5.9	0.6			
					5.6	0.4			
					6	0.5			

						7.8	1.1			
						7.8	0.7			
						8	1.1			
						11.9	1.7			
					Average	7.591666667	0.85			
					Standard Deviation	1.805777764	0.365563078			
1186		-40.3	11.7	11.8		6.8	0.6	X		
						6.4	0.6			
						9.6	1.3			
						9.1	1.2			
						8.2	1.3			
						8.4	1.2			
						7	0.7			
						5.9	0.7			
						8.1	1			
						7.1	0.6			
						7	0.7			
						8.3	0.8			
					Average	7.658333333	0.891666667			
					Standard Deviation	1.123677674	0.287491765			
1187		-42.5	13.9	8.7		7.5	0.7	X		
						5.3	0.6			
						2.4	0.3			
						1.7	0.2			
						1.3	0.3			
						1.8	0.3			
						3.3	0.3			
						3.6	0.4			
						5.2	0.5			
						7	0.7			
						8.2	0.9			
						7.2	0.8			
					Average	4.541666667	0.5			
					Standard Deviation	2.511232343	0.233549683			

1188		-49.4	18.4	17.4		5.7	0.8	X		
						4	0.4			
						5.4	0.3			
						5.4	0.3			
						3.5	0.4			
						4	0.3			
						4.4	0.3			
						4.1	0.4			
						2.7	0.3			
						4.5	0.6			
						4.9	0.4			
						7.9	1.2			
					Average	4.708333333	0.475			
					Standard Deviation	1.320095267	0.273446023			
1189		-37.9	16.9	6.3		12.9	1.2	X		
						12.3	1.2			
						9	0.5			
						11.3	0.9			
						11.7	0.6			
						11.1	0.6			
						12.3	1.1			
						12.5	1.3			
						11	1.6			
						2.9	3.9			
						12.9	1.2			
						10.9	1			
					Average	10.9	1.258333333			
					Standard Deviation	2.745906044	0.892858874			
1190		-36.9	18.3	14.5		8.2	0.8	X		
						7.2	0.7			
						8.1	0.6			
						6.7	0.5			
						4.1	0.5			

						5.2	0.4			
						4	0.5			
						5.2	0.4			
						5.4	0.6			
						7.3	0.5			
						7	0.7			
						7.7	0.8			
					Average	6.341666667	0.583333333			
					Standard Deviation	1.495726235	0.140345893			
1191		-36.9	13.2	14		10.7	1.6	X		
						11.6	1			
						8.6	0.9			
						8	0.9			
						5.5	0.6			
						8	1			
						8.3	0.9			
						7.6	0.9			
						8.1	0.8			
						6.3	0.7			
						10.1	1.3			
						9.8	1.5			
					Average	8.55	1.008333333			
					Standard Deviation	1.758873606	0.305876782			
1192		-32.5	17.4	13.7		5	0.6	X		
						3.1	0.4			
						2.4	0.3			
						2.1	0.3			
						2	0.4			
						1.6	0.2			
						1.6	0.3			
						2	0.3			
						2	0.3			
						2.4	0.4			
						2.8	0.3			

						5.1	0.4			
					Average	2.675	0.35			
					Standard Deviation	1.192495474	0.1			
1193		-30.3	17.5	8		7.2	0.7	X		
						6	0.8			
						5.5	0.7			
						5.1	0.7			
						3.3	0.5			
						4.7	0.6			
						7.2	0.8			
						5.7	0.7			
						5.9	0.9			
						6.9	0.5			
						8.4	0.8			
						6.3	0.8			
					Average	6.016666667	0.708333333			
					Standard Deviation	1.337455748	0.124011241			
1194		-30.1	13.1	10		5.4	1	X		
						6.2	1			
						5.8	0.6			
						5.8	0.7			
						4.1	0.8			
						4.6	0.8			
						5.2	1			
						6.2	0.9			
						7.4	1			
						7	0.8			
						6.7	0.7			
						6.6	0.9			
					Average	5.916666667	0.85			
					Standard Deviation	0.974990287	0.138169856			
1195		-28.1	10.5	20.3		4.3	0.6	X		
						3.8	0.3			

						6.9	0.8			
						4.7	0.5			
						3.8	0.5			
						4.1	0.5			
						4.4	0.5			
						4.1	0.5			
						4.7	0.4			
						5.9	0.5			
						5.8	0.8			
						5.9	0.6			
					Average	4.86666667	0.54166667			
					Standard Deviation	1.008449154	0.144337567			
1196		-25.9	13.1	20		6.4	0.7	X		
						5.6	0.6			
						5	0.8			
						5	0.6			
						4.7	0.5			
						3.8	0.6			
						3.5	0.6			
						3.8	0.7			
						4.2	0.6			
						4.3	0.6			
						4.6	0.6			
						4.3	0.8			
					Average	4.6	0.64166667			
					Standard Deviation	0.820199532	0.090033664			
1197		-23.0	15.8	12.1		5.9	0.6	X		
						6.8	0.7			
						2.8	0.8			
						5	0.5			
						6	0.5			
						5.1	0.5			
						3.2	0.8			
						5	0.6			

						5.6	0.7			
						5.3	0.5			
						5.2	0.8			
						3.9	0.8			
					Average	4.983333333	0.65			
					Standard Deviation	1.161373273	0.131425748			
1198		-23.4	18.5	10.3		4.1	1.2	X		
						4.5	1			
						4	0.9			
						3.6	0.9			
						4.5	0.8			
						4.1	0.9			
						4.8	0.8			
						5	0.9			
						2.9	0.9			
						3.9	0.5			
						5.2	0.8			
						4.2	0.8			
					Average	4.233333333	0.866666667			
					Standard Deviation	0.630055313	0.161432977			
1199		-29.1	17.5	6.5		4.9	0.7	X		
						3.2	0.4			
						4	0.7			
						2.2	0.4			
						3.2	0.5			
						3.8	0.6			
						4	0.7			
						4.2	0.7			
						4.8	0.5			
						2.3	0.4			
						2.8	0.5			
						4.2	0.8			
					Average	3.633333333	0.575			
					Standard Deviation	0.894765925	0.142222617			

1200		-22.8	10.4	23.2		3.8	0.3	X		
						7	0.5			
						7.5	0.6			
						7.3	0.7			
						7	0.6			
						5.8	0.4			
						5.7	0.3			
						4.5	0.3			
						3.5	0.3			
						4	0.2			
						3.2	0.3			
						3.6	0.3			
					Average	5.241666667	0.4			
					Standard Deviation	1.654447633	0.159544807			
1201		-18.3	15.2	25.3		5	0.9	X		
						4.5	0.8			
						4.9	0.8			
						4.1	0.8			
						4	0.8			
						4.7	0.8			
						4	0.8			
						4.6	1			
						4.9	1			
						6.1	1.6			
						6.9	1.4			
						2.9	0.9			
					Average	4.716666667	0.966666667			
					Standard Deviation	1.026763081	0.264001837			
1202		-16.2	13.1	15.6		4.4	1.1	X		
						6.1	1.2			
						6.3	1.4			
						5.7	1			
						4.3	0.8			

						5.5	0.8			
						3.2	0.8			
						2.9	0.8			
						3.8	0.6			
						3.3	0.9			
						4.2	0.9			
						6.4	1			
					Average	4.675	0.941666667			
					Standard Deviation	1.272167085	0.21514618			
1203		-12.1	15.2	16.7		3.2	0.9	X		
						2.7	0.6			
						4.2	0.6			
						5.6	1.1			
						3.2	0.7			
						4.3	0.7			
						3.7	0.6			
						4.1	0.6			
						2.7	0.5			
						3.2	0.8			
						4.3	1			
						4.4	0.9			
					Average	3.8	0.75			
					Standard Deviation	0.845307905	0.188293774			
1204	Dollond	-10.5	14.4	12.8		6	1.7	X		
						4.5	0.8			
						3.8	0.7			
						2.4	0.7			
						2.4	0.8			
						1.7	0.7			
						1.6	0.7			
						2.7	0.8			
						2.6	0.7			
						3.5	1.2			
						7.8	2			

						6.1	2.3			
					Average	3.758333333	1.091666667			
					Standard Deviation	1.965825449	0.579118976			
1205		-12.8	16.8	12.8		6	1.7	X		
						4.5	0.8			
						3.8	0.7			
						2.4	0.7			
						2.4	0.8			
						1.7	0.7			
						1.6	0.7			
						2.7	0.8			
						2.6	0.7			
						3.5	1.2			
						7.8	2			
						6.1	2.3			
					Average	3.758333333	1.091666667			
					Standard Deviation	1.965825449	0.579118976			
1206		-16.4	10.8	14		5.7	0.7	X		
						5.6	0.6			
						6	0.7			
						6	0.5			
						4.4	0.5			
						4.3	0.6			
						3.9	0.5			
						3.7	0.5			
						2.4	0.5			
						3.8	0.6			
						5.3	0.7			
						6.4	0.7			
					Average	4.791666667	0.591666667			
					Standard Deviation	1.218388155	0.090033664			
1207		-8.2	12.5	9.8		6.5	1.1	X		
						4.4	0.8			

						4.2	0.9			
						2.1	0.8			
						4.1	0.8			
						4	0.8			
						3.3	0.8			
						3.8	0.8			
						5.4	1			
						5	1			
						4.9	0.9			
						6.3	1			
					Average	4.5	0.891666667			
					Standard Deviation	1.230668702	0.108362467			
1208	Alfraganus	-5.5	19.0	20.1		7	1.9	X		
						6.6	0.8			
						5.4	0.4			
						6.7	1			
						5.8	1			
						4.2	0.8			
						3.5	0.9			
						3.5	0.9			
						3.6	1.1			
						4.4	1.1			
						6.4	1.3			
						5.3	1.4			
					Average	5.2	1.05			
					Standard Deviation	1.323906066	0.370503343			
1209	Theon Senior	-0.8	15.5	16.8		7.3	2.2	X		
						7.2	1.8			
						7.5	1.5			
						6.3	1.3			
						6.3	1			
						6.1	1.4			
						5	1.4			
						6.2	0.9			

						3.4	1.4			
						6.5	1.4			
						6.4	1.9			
						6.4	1.8			
					Average	6.216666667	1.5			
					Standard Deviation	1.10275138	0.371728151			
1210		-4.0	12.3	8.3		6.2	0.8	X		
						5.1	0.6			
						4.5	0.7			
						4.5	0.7			
						5.4	0.8			
						5.7	0.8			
						7.5	1.2			
						8.2	1.3			
						7.4	0.9			
						7.7	1.3			
						7.5	1.1			
						6.8	0.9			
					Average	6.375	0.925			
					Standard Deviation	1.312267295	0.241679728			
1211		-6.1	22.3	14.6		6.9	1.3	X		
						5.8	1.1			
						5.6	1.1			
						5.3	0.7			
						5	0.8			
						6	0.9			
						4.2	1			
						4.5	1.1			
						5.9	1.2			
						6.4	1.1			
						6	1.2			
						7.8	1.4			
					Average	5.783333333	1.075			
					Standard Deviation	0.992547991	0.200567377			

1212		-2.7	26.0	10		11.2	4	X		
						10.7	2.9			
						16.1	8.7			
						14.7	6.4			
						10.4	2.8			
						11.1	3			
						12.4	3.4			
						9.7	1.4			
						12.2	4.7			
						12.1	5.3			
						10.9	3.9			
						10.6	2			
					Average	11.84166667	4.041666667			
					Standard Deviation	1.862773267	2.017855898			
1213		-4.9	22.3	13.6		6.5	1.3	X		
						6.2	1.1			
						5.5	0.8			
						3.6	0.7			
						5.6	0.8			
						6.8	0.9			
						5.6	1.2			
						5.1	1.1			
						7.6	1.5			
						3.9	0.9			
						6.1	1.4			
						2.3	1.1			
					Average	5.4	1.066666667			
					Standard Deviation	1.489966443	0.253460893			
1214		-4.6	29.8	12		3.2	0.5	X		
						3.4	3			
						4.7	0.5			
						4.8	0.6			
						2.9	0.6			

						3.7	0.7			
						5	0.8			
						4.7	0.8			
						4.8	1			
						4	0.6			
						2.7	0.5			
						4.8	0.7			
					Average	4.058333333	0.858333333			
					Standard Deviation	0.844725166	0.690794448			
1215		-9.9	22.1	12		3.2	0.5	X		
						3.4	3			
						4.7	0.5			
						4.8	0.6			
						2.9	0.6			
						3.7	0.7			
						5	0.8			
						4.7	0.8			
						4.8	1			
						4	0.6			
						2.7	0.5			
						4.7	0.7			
					Average	4.05	0.858333333			
					Standard Deviation	0.837203136	0.690794448			
1216	Kant	-10.6	20.1	32.3		2.6	0.8	X		
						4.2	0.6			
						3.4	0.9			
						2.4	0.7			
						3.8	0.8			
						4	0.8			
						2.1	0.5			
						4.6	0.7			
						3.2	0.7			
						5.3	1.1			
						3.3	0.7			

						3.3	0.7			
					Average	3.516666667	0.75			
					Standard Deviation	0.926217463	0.150755672			
1217		-14.0	20.5	13		4.2	1	X		
						4.1	0.8			
						2.7	0.6			
						3.3	0.7			
						3.8	0.7			
						2.8	0.6			
						2.3	0.7			
						6.1	1			
						5.3	1.5			
						3.8	1.1			
						2.1	0.6			
						3.6	0.5			
					Average	3.675	0.816666667			
					Standard Deviation	1.177149871	0.285508584			
1218		-13.8	23.1	15.9		2.7	0.4	X		
						1.3	0.5			
						1.9	0.5			
						0.6	0.6			
						0	0.4			
						0.2	0.3			
						0.4	0.4			
						1.7	0.4			
						1.8	0.5			
						1.4	0.6			
						0.7	0.4			
						1.5	0.6			
					Average	1.183333333	0.466666667			
					Standard Deviation	0.807727827	0.098473193			
1219		-15.9	25.3	9.9		1.8	0.4	X		
						3.2	0.6			

						2.1	0.4			
						1.2	0.4			
						0.6	0.3			
						1.8	0.4			
						1.3	0.4			
						2.8	0.4			
						1.7	0.4			
						2	0.4			
						1.7	0.4			
						0.7	0.3			
					Average	1.741666667	0.4			
					Standard Deviation	0.758537269	0.073854895			
1220		-18.7	26.8	15.6		2.9	0.6	X		
						3.7	0.5			
						4	0.7			
						3.2	0.6			
						4	0.5			
						3.7	0.6			
						3.1	0.5			
						2	0.5			
						3.7	0.7			
						4.3	0.7			
						4	0.6			
						3.2	0.7			
					Average	3.483333333	0.6			
					Standard Deviation	0.636515133	0.085280287			
1221		-17.5	20.5	12		4.4	0.9	X		
						5.5	1			
						4.4	0.9			
						4.9	0.9			
						3.6	0.8			
						4.5	0.9			
						3.4	0.6			
						4.7	0.9			

						4.4	0.9			
						4.1	0.8			
						4.8	0.9			
						3.6	0.7			
					Average	4.358333333	0.85			
					Standard Deviation	0.608213977	0.108711461			
1222		-20.2	-22.2	13		5.8	1.3	X		
						3.4	0.8			
						2.1	0.7			
						2.7	0.5			
						3.5	0.6			
						6.2	1.1			
						6	0.9			
						3.8	0.6			
						3.6	0.6			
						4.4	0.7			
						3.3	0.5			
						5.1	1.1			
					Average	4.158333333	0.783333333			
					Standard Deviation	1.339917456	0.262274434			
1223		-25.6	25.5	12.3		6.2	0.5	X		
						5.5	0.5			
						5	0.4			
						4.4	0.4			
						2.9	0.4			
						3.2	0.4			
						4.5	0.6			
						4.8	0.6			
						5.7	0.5			
						4.5	0.5			
						5.5	0.5			
						5.1	0.5			
					Average	4.775	0.483333333			
					Standard Deviation	0.971526447	0.071774056			

1224		-25.7	29.7	8		6.6	0.7	X		
						4.1	0.6			
						6	0.7			
						4.9	0.7			
						5	0.7			
						4.1	0.5			
						4.6	0.7			
						4	0.6			
						5.5	0.6			
						5.5	0.9			
						5.7	0.6			
						7.1	0.7			
					Average	5.258333333	0.666666667			
					Standard Deviation	0.997686718	0.098473193			
1225		-28.6	25.0	19.5		5.2	0.7	X		
						4.9	0.6			
						4.3	0.5			
						3.8	0.6			
						4.6	0.6			
						4.5	0.8			
						3.5	0.5			
						4.1	0.7			
						4.5	0.6			
						5.7	0.7			
						4.6	0.6			
						4.1	0.8			
					Average	4.483333333	0.641666667			
					Standard Deviation	0.599747422	0.099620492			
1226		-28.8	20.7	13.3		3.8	0.9	X		
						5.3	0.6			
						4.4	0.7			
						3.3	0.5			
						4.9	0.6			

						3.8	0.6			
						4.1	0.5			
						4	0.6			
						4.7	0.5			
						5.3	0.6			
						5.3	0.7			
						6	0.6			
					Average	4.575	0.616666667			
					Standard Deviation	0.805802818	0.111464086			
1227		-23.8	21.1	12		5.7	0.8	X		
						4.9	0.8			
						5.5	0.9			
						4.6	0.7			
						4.8	0.7			
						4.3	0.8			
						5.3	0.9			
						5.2	0.7			
						6.9	0.9			
						6.1	0.9			
						5.9	0.9			
						5.4	0.8			
					Average	5.383333333	0.816666667			
					Standard Deviation	0.713293683	0.083484711			
1228		-32.1	21.6	21.6		4.9	0.5	X		
						6.4	0.7			
						4.6	0.6			
						3.7	0.5			
						2.8	0.5			
						4.3	0.5			
						4.7	0.5			
						4.5	0.7			
						4.4	0.4			
						7.8	0.8			
						7.5	0.7			

						5.5	0.6			
					Average	5.091666667	0.583333333			
					Standard Deviation	1.479839262	0.119341628			
1229		-34.8	23.0	12.6		5.5	0.4	X		
						5.8	0.7			
						5.6	0.7			
						4	0.4			
						3.1	0.4			
						1.6	0.4			
						5.1	0.7			
						7	0.8			
						5.6	0.6			
						6.3	0.7			
						5.5	0.5			
						2.4	0.5			
					Average	4.791666667	0.566666667			
					Standard Deviation	1.65059677	0.149747262			
1230		-34.2	27.8	12		4	1.1	X		
						4.6	0.7			
						3	0.5			
						2.4	0.5			
						2.8	0.5			
						2.6	0.6			
						3.9	0.4			
						2.6	0.5			
						8.1	1.3			
						3.5	0.5			
						2.4	0.5			
						3	0.6			
					Average	3.575	0.641666667			
					Standard Deviation	1.588094914	0.274551977			
1231		-31.8	28.4	21.1		7.6	1	X		
						5	0.7			

						4.2	0.7			
						4	0.7			
						3.7	0.6			
						5	0.7			
						3.8	0.8			
						6.6	0.9			
						4	0.8			
						7.8	1			
						6.4	0.9			
						7.6	1			
					Average	5.475	0.816666667			
					Standard Deviation	1.622077792	0.140345893			
1232		-40.0	26.2	22		8.4	0.4	X		
						5.9	0.4			
						5.5	0.4			
						5	0.4			
						2.6	0.3			
						2.4	0.4			
						3.3	0.3			
						3.2	0.3			
						3.7	0.4			
						3.4	0.4			
						5.7	0.4			
						6.8	0.5			
					Average	4.658333333	0.383333333			
					Standard Deviation	1.854948337	0.057735027			
1233		-39.1	20.9	6.8		5.1	0.6	X		
						5.6	0.7			
						5.5	0.6			
						4.8	0.4			
						4.7	0.5			
						4.9	0.7			
						4.6	0.4			
						4.5	0.5			

						5.5	0.5			
						5.2	0.7			
						5.1	0.6			
						4.7	0.5			
					Average	5.016666667	0.558333333			
					Standard Deviation	0.376184996	0.108362467			
1234		-42.5	23.5	13.7		4.2	0.3	X		
						4.5	0.3			
						5.3	0.3			
						5.4	0.5			
						4.8	0.3			
						3.4	0.3			
						3.8	0.3			
						2.8	0.2			
						4.2	0.2			
						4.2	0.3			
						5.3	0.5			
						6.3	0.4			
					Average	4.516666667	0.325			
					Standard Deviation	0.966562168	0.09653073			
1235		-41.3	27.5	15.5		8.1	0.9	X		
						4.1	0.3			
						3.4	0.4			
						6.4	0.4			
						5.5	0.5			
						5	0.5			
						5.6	0.6			
						4.9	0.4			
						4.7	0.4			
						7.5	0.7			
						5.3	0.8			
						7.9	0.8			
					Average	5.7	0.558333333			
					Standard Deviation	1.493014035	0.197522534			

1236		-47.7	25.1	15.5		8.3	0.7	X		
						7.1	0.6			
						4.3	0.5			
						4.8	0.5			
						2.6	0.4			
						3.6	0.4			
						3.6	0.3			
						4.7	0.5			
						5.1	0.5			
						8.3	0.6			
						8.8	0.6			
						6.6	0.6			
					Average	5.65	0.516666667			
					Standard Deviation	2.098267684	0.111464086			
1237		-46.7	21.6	10.6		4.8	0.3	X		
						5.6	0.4			
						3.5	0.3			
						3.8	0.4			
						2.7	0.3			
						1.9	0.3			
						2.4	0.3			
						3.8	0.2			
						3.8	0.3			
						3.2	0.5			
						7	0.6			
						6.7	0.5			
					Average	4.1	0.366666667			
					Standard Deviation	1.624807681	0.115470054			
1238		-42.5	28.9	11.1		6.1	0.6	X		
						6.3	1			
						6.4	0.8			
						5.5	0.7			
						7.4	1.1			

						4.7	0.7			
						4.9	0.6			
						2.6	0.5			
						4.5	0.6			
						6.7	0.8			
						5.9	0.9			
						6	0.9			
					Average	5.583333333	0.766666667			
					Standard Deviation	1.264791275	0.182574186			
1239		-53.5	27.8	16.5		7.4	0.5	X		
						9.3	0.6			
						6.3	0.4			
						3	0.3			
						2.4	0.2			
						2.7	0.1			
						1.2	0.2			
						2.8	0.2			
						4.3	0.3			
						6.1	0.6			
						6.1	0.5			
						9.5	1.1			
					Average	5.091666667	0.416666667			
					Standard Deviation	2.768806219	0.27247463			
1240		-56.1	27.8	17.5		5.6	0.4	X		
						6.4	0.4			
						6	0.5			
						4.5	0.2			
						3.1	0.4			
						1.8	0.2			
						3	0.3			
						2.9	0.3			
						1.7	0.3			
						4.8	0.5			
						8.4	0.7			

						10.3	1.4			
					Average	4.875	0.466666667			
					Standard Deviation	2.632359812	0.325669474			
1241		-59.1	25.4	16		8	0.9	X		
						7.8	1.1			
						5.6	0.6			
						5.2	0.4			
						4.1	0.3			
						0.8	0.2			
						2.3	0.3			
						1.4	0.2			
						1.2	0.2			
						0.8	0.1			
						6.9	0.4			
						6.2	0.7			
					Average	4.191666667	0.45			
					Standard Deviation	2.783541999	0.31188576			
1242		-59.4	28.7	14.2		8.8	1.2	X		
						3.9	0.3			
						4.2	0.3			
						4	0.5			
						3.1	0.2			
						3.2	0.3			
						9.4	0.9			
						4.7	0.4			
						9.1	0.8			
						10.6	1.5			
						4.3	0.3			
						4.2	0.3			
					Average	5.791666667	0.583333333			
					Standard Deviation	2.785827226	0.421756788			
1243		-51.3	23.2	6.5		4.4	0.2			
						5.6	0.4			

						5.5	0.5			
						5	0.3			
						3.5	0.2			
						2.1	0.2			
						3.2	0.3			
						4.1	0.3			
						4.3	0.3			
						5.6	6			
						4.3	0.3			
						7.8	0.8			
					Average	4.61666667	0.81666667			
					Standard Deviation	1.449033115	1.640860824			
1244		-61.8	24.7	19.5		8.5	0.9	X		
						9.2	0.9			
						5.7	0.3			
						1.1	0.2			
						4.4	0.3			
						2.1	0.1			
						0.7	0.2			
						3.1	0.3			
						2.7	0.2			
						1.4	0.2			
						8.9	0.9			
						7.1	0.4			
					Average	4.575	0.408333333			
					Standard Deviation	3.193210126	0.305876782			
1245		-64.0	29.4	16.6		7.7	0.4	X		
						10	0.8			
						8.5	0.7			
						7.6	0.8			
						5.4	0.5			
						2.3	0.2			
						3.9	0.2			
						2.6	0.2			

						2.7	0.2			
						4.4	0.3			
						10	1.2			
						11.2	1.1			
					Average	6.358333333	0.55			
					Standard Deviation	3.200414272	0.363067737			
1246		-66.3	23.3	12.1		10.5	0.9	X		
						8.9	1.1			
						1.3	0.3			
						0.4	0.1			
						1.4	0.2			
						1.5	0.2			
						3.3	0.5			
						6.1	0.6			
						7.5	0.4			
						5.6	0.7			
						7.7	0.7			
						4.4	0.2			
					Average	4.883333333	0.491666667			
					Standard Deviation	3.353650205	0.314666731			
1247		-69.9	25.0	18.8		13.2	3	X		
						5.1	0.5			
						1.9	0.1			
						2.8	0.1			
						1.7	0.2			
						0.7	0.8			
						0.2	0.1			
						2	0			
						1.2	0.1			
						8.3	0.8			
						9	1.1			
						10	1.3			
					Average	4.675	0.675			
					Standard Deviation	4.350365711	0.855065122			

1248		-63.3	20.2	11.6		9.1	0.3	X		
						14.2	1.8			
						10.6	0.5			
						6.1	0.2			
						6	0.2			
						5.8	0.2			
						8.2	0.3			
						8.4	0.3			
						7.1	0.3			
						10.3	0.7			
						9.6	0.5			
						9.2	0.7			
					Average	8.71666667	0.5			
					Standard Deviation	2.393108793	0.447213595			
1249		-68.9	39.7	17.3		3	0.2	X		
						16.6	4.9			
						12.2	1.9			
						4.4	0.5			
						2.3	0.3			
						3.3	0.2			
						7.6	0.7			
						1.1	0.2			
						2.9	0.3			
						5.7	0.4			
						6.1	0.4			
						5.6	0.5			
					Average	5.9	0.875			
					Standard Deviation	4.468678877	1.349831639			
1250		-68.6	34.2	19.7		11.4	2.5	X		
						11	1.9			
						8.3	1			
						2.8	0.5			
						1.6	0.2			

						0.2	0.1			
						3	0.4			
						0.8	0.2			
						1	0.1			
						9.7	1.6			
						8.3	1			
						5.2	0.3			
					Average	5.275	0.816666667			
					Standard Deviation	4.23236985	0.798673142			
1251		-63.0	37.9	9.1		9	0.8	X		
						8.5	0.8			
						5.7	0.4			
						3.9	0.3			
						1.3	0.2			
						1.5	0.3			
						1.5	0.2			
						3	0.2			
						4.1	0.4			
						8.3	0.8			
						8.3	0.6			
						8	1.3			
					Average	5.258333333	0.525			
					Standard Deviation	3.058953574	0.34145411			
1252		-61.5	33.8	12		7.9	0.9	X		
						8.1	0.9			
						6.1	0.4			
						2.6	0.2			
						2.2	0.2			
						2.3	0.2			
						2.2	0.3			
						4.1	0.4			
						5.8	0.7			
						7.5	0.6			
						8.8	1.1			

						4.9	0.5			
					Average	5.208333333	0.533333333			
					Standard Deviation	2.515211299	0.308466392			
1253		-66.9	39.8	26		8.7	0.9	X		
	unusual					8	0.4			
	shape					6.1	0.2			
						3.2	0.3			
						3.7	0.2			
						0.7	0.1			
						1.3	0			
						1	0.2			
						1.8	0.6			
						6.3	0.7			
						8.4	0.8			
						8.6	0.8			
					Average	4.816666667	0.433333333			
					Standard Deviation	3.205913097	0.311399578			
1254		-51.2	38.8	17		6.2	0.6	X		
						3.8	0.3			
						3.9	0.3			
						2.9	0.4			
						2.3	0.4			
						1.4	0.2			
						3.1	0.2			
						3.6	0.5			
						5.5	0.6			
						5.2	0.5			
						6	0.5			
						4.9	0.5			
					Average	4.066666667	0.416666667			
					Standard Deviation	1.512573564	0.140345893			
1255		-53.7	33.4	12.8		8.3	0.6	X		
						8.8	0.7			

						4.8	0.5			
						3.8	0.3			
						4.7	0.4			
						5.2	0.4			
						4.4	0.4			
						6	0.5			
						7.4	0.7			
						9	0.6			
						2.9	0.4			
						4.2	0.4			
					Average	5.79166667	0.49166667			
					Standard Deviation	2.079973048	0.131137217			
1256		-50.4	30.8	11		4.3	0.4	X		
						5.3	0.4			
						2.1	0.3			
						2.3	0.3			
						1.3	0.2			
						0.4	0.3			
						2.1	0.4			
						4.5	0.5			
						9.3	1.1			
						5.1	0.3			
						3.7	0.4			
						4.3	0.5			
					Average	3.725	0.425			
					Standard Deviation	2.354154934	0.230118547			
1257		-59.0	30.9	15		8.6	0.6	X		
						8.8	0.7			
						7.9	0.5			
						2.6	0.2			
						1.7	0.2			
						1.1	0.1			
						6.4	0.6			
						9.3	0.8			

						8.7	0.6			
						2.2	0.1			
						4.9	0.3			
						5.7	0.5			
					Average	5.658333333	0.433333333			
					Standard Deviation	3.08882394	0.242462118			
1258		-56.1	38.1	26.5		6.5	0.5	X		
						9.4	0.6			
						8.8	1.2			
						3.7	0.3			
						4.1	0.5			
						4.3	0.4			
						4.8	0.4			
						5.5	0.3			
						7.4	0.7			
						8.9	0.6			
						6.6	0.7			
						4.6	0.4			
					Average	6.216666667	0.55			
					Standard Deviation	2.02835954	0.246797672			
1259		-47.5	36.3	20		6.9	0.8	X		
						6.8	0.6			
						6.5	0.4			
						2.9	0.3			
						2.6	0.3			
						2.9	0.3			
						4.1	0.6			
						7	0.6			
						5.5	0.4			
						6.2	0.5			
						6.2	0.5			
						6.3	0.7			
					Average	5.325	0.5			
					Standard Deviation	1.706737984	0.165144565			

1260		-45.7	33.2	22.6		8.7	1	X		
						6	0.6			
						7.8	0.7			
						5.1	0.4			
						3.6	0.3			
						2.8	0.3			
						3.6	0.4			
						1.2	0.2			
						3.2	0.4			
						4.2	0.3			
						5.4	0.3			
						7.6	0.5			
					Average	4.933333333	0.45			
					Standard Deviation	2.26608727	0.223606798			
1261		-43.2	34.2	21		4.9	0.5	X		
						6	0.5			
						5.5	0.8			
						5.3	0.6			
						3.3	0.4			
						3.6	0.4			
						4.1	0.6			
						4.2	0.5			
						7.8	0.9			
						5.2	0.6			
						2.8	0.5			
						5.6	0.7			
					Average	4.858333333	0.583333333			
					Standard Deviation	1.364789916	0.152752523			
1262		-47.0	33.4	12.9		4.6	0.8	X		
						7.7	0.7			
						5.3	0.4			
						3	0.2			
						2.6	0.3			

						3.9	0.4			
						5.6	0.4			
						5	0.5			
						4.5	0.4			
						3.6	0.4			
						6.1	1.1			
						2.9	0.3			
					Average	4.566666667	0.491666667			
					Standard Deviation	1.490779743	0.253908836			
1263		-40.7	36.9	14.1		3.1	0.4	X		
						3.7	0.7			
						2.9	0.4			
						3.4	0.5			
						4.1	0.5			
						3.8	0.5			
						2.1	0.4			
						2.4	0.4			
						2.4	0.4			
						5.7	0.7			
						3.7	0.5			
						4	0.6			
					Average	3.441666667	0.5			
					Standard Deviation	0.976504279	0.112815215			
1264		-47.9	34.8	11		7.2	0.5	X		
						5.3	0.5			
						6.1	0.5			
						4.2	0.3			
						3.3	0.3			
						3.5	0.6			
						3.8	0.3			
						4.4	0.3			
						4	0.4			
						6.4	0.7			
						6.6	0.6			

						4.9	0.6			
					Average	4.975	0.466666667			
					Standard Deviation	1.322617927	0.143548113			
1265	Wohler	-38.3	31.2	25.5		6.9	0.8	X		
						5.4	0.5			
						6.1	0.7			
						4.8	0.5			
						4.2	0.6			
						3.6	0.5			
						3.7	0.5			
						4.4	0.4			
						3.4	0.5			
						4.7	0.5			
						5.8	0.7			
						7.4	1.1			
					Average	5.033333333	0.608333333			
					Standard Deviation	1.304072874	0.192865159			
1266		-35.6	34.4	14		8.4	1.1	X		
						5.8	0.8			
						4.7	0.7			
						5.9	0.9			
						5.9	0.9			
						6	0.8			
						5.1	0.8			
						6.3	0.8			
						6.5	0.7			
						8.3	1.3			
						4.3	0.7			
						7	0.9			
					Average	6.183333333	0.866666667			
					Standard Deviation	1.259028004	0.177525073			
1267		-30.5	35.8	11.7		5.9	0.9	X		
						7	0.9			

						3.6	0.5			
						3.2	0.4			
						4.1	0.4			
						3.9	0.8			
						4.2	0.6			
						5.5	1.1			
						6.9	1			
						6	1			
						7.2	1.4			
						2.7	0.5			
					Average	5.016666667	0.791666667			
					Standard Deviation	1.585636284	0.314666731			
1268		-33.3	38.6	11.3		3	0.6	X		
						5.9	0.9			
						4.8	0.6			
						3.5	0.4			
						4.2	0.6			
						4.9	0.6			
						5.7	0.7			
						4.3	0.7			
						4.3	0.4			
						2.7	0.5			
						4.7	0.6			
						4.4	0.6			
					Average	4.366666667	0.6			
					Standard Deviation	0.960429197	0.134839972			
1269		-36.3	38.6	8.3		5.3	0.7	X		
						4.2	0.7			
						5	0.6			
						3.2	0.5			
						5.4	0.6			
						4.6	0.8			
						4.9	0.6			
						6.6	1.1			

						4.1	0.6			
						5.4	0.8			
						4.1	0.5			
						5.7	0.8			
					Average	4.875	0.691666667			
					Standard Deviation	0.90163992	0.167648622			
1270		-27.0	32.2	15		6.7	0.5	X		
						6.2	0.6			
						3.6	0.3			
						3.6	0.5			
						3.9	0.5			
						1.9	0.2			
						3	0.4			
						3.1	0.5			
						3.8	0.5			
						4.7	0.9			
						5	0.7			
						5.6	0.7			
					Average	4.258333333	0.525			
					Standard Deviation	1.413222194	0.186474468			
1271		-24.4	36.3	18.2		5.8	1.3	X		
						4	0.8			
						4.2	0.6			
						3.4	1			
						3.2	0.8			
						3.4	0.9			
						4.5	0.9			
						4.7	0.9			
						5.5	1			
						5.3	0.9			
						4.6	1			
						5.8	1.3			
					Average	4.533333333	0.95			
					Standard Deviation	0.929646397	0.197714211			

1272		-22.5	37.2	27		3.3	0.7	X		
						5	0.8			
						2.2	0.5			
						2.5	0.7			
						2	0.7			
						2.2	0.5			
						2.3	0.5			
						1.1	0.5			
						1.2	0.5			
						3.6	0.8			
						4.9	1.1			
						4.8	1			
					Average	2.925	0.691666667			
					Standard Deviation	1.385066457	0.206522433			
1273		-20.2	30.9	11.8		3.8	0.7	X		
						5	0.9			
						6	1			
						6.3	1			
						4.2	0.5			
						3.4	0.6			
						3.3	0.6			
						4.3	0.9			
						4	0.8			
						5.2	0.7			
						4.4	0.8			
						5	0.9			
					Average	4.575	0.783333333			
					Standard Deviation	0.950717432	0.164224532			
1274		-23.2	33.9	9.6		1.6	0.5	X		
						2.5	0.7			
						1.9	0.7			
						2.7	0.6			
						2.5	0.8			

						3	0.9			
						4.3	1			
						3.7	1			
						4.1	1			
						2.4	0.7			
						3.3	0.8			
						1.9	0.8			
					Average	2.825	0.791666667			
					Standard Deviation	0.876070773	0.162135372			
1275		-21.8	30.9	27		4.5	1.2	X		
						4.3	0.6			
						3.7	0.8			
						3.6	0.7			
						3.1	0.5			
						6.4	0.9			
						6.9	1.2			
						5.4	0.7			
						4	0.8			
						2.7	0.4			
						4.7	0.7			
						4.3	0.8			
					Average	4.466666667	0.775			
					Standard Deviation	1.249969697	0.241679728			
1276		-19.8	37.3	13.7		6.3	1.4	X		
						10	2.3			
						9.6	2.4			
						6.9	1.6			
Highland	Surrounded by Mare.					3.8	1.7			
	Hi ti					5.3	1.4			
						5.7	1			
						5.6	1.4			
						5.3	1.4			
						5.2	1.5			
						4.2	1.3			

						6.7	2.1			
					Average	6.216666667	1.625			
					Standard Deviation	1.900637851	0.42666785			
1277	Rosse	-17.9	35.0	10.6		12	3		X	
						11.8	2.3			
						11.6	2			
						10.8	2.1			
						10.7	2.1			
						10.8	2			
						9.7	2.2			
						8.9	1.7			
						12.3	2.5			
						10.3	1.9			
						11.3	2.3			
						12.2	2.9			
					Average	11.03333333	2.25			
					Standard Deviation	1.04301428	0.387298335			
1278		-17.5	30.1	5.5		8.6	1.9		X	
						12.1	2.7			
						12.8	3.6			
						11.4	2.9			
						9.3	2.1			
						8.8	2			
						7.7	1.6			
						11.1	1.8			
						6.2	1.6			
						7.6	2			
						12.1	3			
						10.5	2.5			
					Average	9.85	2.308333333			
					Standard Deviation	2.114667393	0.62879153			
1279		-14.6	39.6	10.9		2.7	0.7		X	
						1.7	0.4			

						1.3	0.7			
						2.1	0.6			
						2.1	0.5			
						1.8	0.7			
						2	0.7			
						4.8	1.3			
						1.6	0.2			
						3.3	0.7			
						2.7	0.7			
						1.4	0.5			
					Average	2.291666667	0.641666667			
					Standard Deviation	0.983923808	0.260971379			
1280		-11.2	39.1	9.8		5.4	0.7	X		
						3.5	0.5			
						5.3	0.8			
						5.2	0.9			
						5	0.8			
						5	0.7			
						4.8	0.6			
						4.9	0.5			
						5.2	0.7			
						4.5	0.8			
						5.6	0.8			
						6.7	0.9			
					Average	5.091666667	0.725			
					Standard Deviation	0.740341854	0.135680105			
1281	Madler	-11.0	29.7	26.5		4.2	1.2	X		
						4.5	0.9			
						2.2	0.8			
						3	0.8			
						2.9	0.8			
						1.2	0.7			
						2.6	1			
						4.6	1.4			

						7.7	1.3			
						8.3	1.1			
						9	1.2			
						4	1.1			
					Average	4.51666667	1.025			
					Standard Deviation	2.520401603	0.226133508			
1282		-9.5	36.0	10.3		5.7	1.1	X		
						3	0.5			
						1.6	0.4			
						2	0.6			
						1.7	0.5			
						3.7	0.4			
						3.1	0.5			
						1.9	0.6			
						3.8	0.5			
						4.5	0.7			
						3.9	0.8			
						5.2	1			
					Average	3.34166667	0.633333333			
					Standard Deviation	1.374745155	0.226969495			
1283		-8.1	33.2	9.9		6.1	1.2	X		
						5.7	1			
						5	1			
						5.7	0.8			
						5.9	1			
						6.5	1.1			
						5.7	0.9			
						5.5	0.9			
						5.9	0.9			
						6.7	0.9			
						5.8	1.2			
						5.7	0.9			
					Average	5.85	0.983333333			
					Standard Deviation	0.442102415	0.126730446			

1284	Leahey	-3.2	37.4	14.3		9.3	1.7	X		
						9.8	1.7			
						10.5	1.6			
						10.3	1.5			
						10.4	1.8			
						9.3	1.6			
						8.9	1.3			
						8.1	1.3			
						7.8	1.4			
						7.3	1.7			
						8.8	1.7			
						8.3	1.7			
					Average	9.066666667	1.583333333			
					Standard Deviation	1.059445252	0.169669911			
1285		-4.3	34.0	14.5		6.2	0.9	X		
						7.6	1.5			
						8.3	1.5			
						5.9	1.2			
						6.8	1.3			
						7.6	1.3			
						7.7	1.2			
						6.5	0.9			
						5.4	0.6			
						8.6	1			
						8.3	1.5			
						6.8	1.2			
					Average	7.141666667	1.175			
					Standard Deviation	1.029084618	0.280016233			
1286		-9.1	39.8	14.9		4.4	0.7	X		
						3.8	0.8			
						4.5	0.7			
						4.5	0.9			
						5.5	0.8			

						5	0.6			
						5.5	0.7			
						4.6	0.6			
						1.8	0.6			
						3.4	0.6			
						4	0.6			
						2.9	0.8			
					Average	4.158333333	0.7			
					Standard Deviation	1.073192631	0.104446594			
1287		-0.1	36.5	5.3		8.4	1.4	X		
						8	0.9			
						7.6	1.3			
						7.4	1.5			
						8.8	1.5			
						10	1.2			
						8.5	1.4			
						9.1	1.5			
						8.4	1.9			
						7.3	1.3			
						8.2	1.1			
						8.2	1			
					Average	8.325	1.333333333			
					Standard Deviation	0.753325959	0.267423169			
1288		-2.0	46.9	9		17.6	6.5	X		
						16.9	4.9			
						17	6.3			
						17.1	6.4			
						16.9	3.3			
						17.3	5.3			
						16.8	4			
						16.6	3.2			
						17.2	5.8			
						17.5	5.6			
						17.2	4.8			

						17.4	6.1			
					Average	17.125	5.183333333			
					Standard Deviation	0.298861476	1.166839814			
1289	Lubbock	-4.0	41.8	12.5		8	1.4	X		
						9.1	1.2			
						9.4	1.6			
						11.8	2.5			
						12.1	2.4			
						11.6	2.5			
						8.4	1.2			
						6.8	1.2			
						9	0.9			
						8.4	1.2			
						8.9	1.5			
						8.1	1.4			
					Average	9.3	1.583333333			
					Standard Deviation	1.670057157	0.562192677			
1290	McClure	-15.3	50.1	24.2		7.2	1.1	X		
						8.5	1.1			
						8	0.9			
						7.1	0.8			
						6.6	0.7			
						10.6	1.6			
						5.6	0.8			
						6.9	1.1			
						7.6	1.1			
						7.6	1			
						9.6	1.2			
						7.8	1			
					Average	7.758333333	1.033333333			
					Standard Deviation	1.335159734	0.234843597			
1291	Belliot	-12.4	48.1	15.8		10	2.2		X	
						8.1	1.5			

						8.8	1.7			
o a small portion of Highland but mostly Mare)						11.1	2.4			
						15.9	3.5			
						15	2.8			
						10.7	2.1			
						8	1.1			
						9.5	1.6			
						9.3	1.2			
						10.1	2.2			
						12.1	3.6			
					Average	10.71666667	2.158333333			
					Standard Deviation	2.514623895	0.817377551			
1292		-12.7	44.9	31.3		7.2	0.9	X		
						8.6	1.1			
						7.7	1.2			
						8.7	1.4			
						8.5	1.6			
						9.6	1.8			
						8.3	1.3			
						7.6	1.3			
						7.5	1			
						5.1	0.8			
						6.9	1.1			
						7.2	1			
					Average	7.741666667	1.208333333			
					Standard Deviation	1.142133835	0.29063671			
1293		-18.9	48.6	9.7		8.8	1.5	X		
						10	1.7			
						9.7	1.5			
						10.9	1.8			
						9.6	1.4			
						9.2	1.4			
						8.5	1.3			
						7.8	1.2			

						6.5	1.2			
						7.8	0.9			
						7.2	1.3			
						6.9	1.3			
					Average	8.575	1.375			
					Standard Deviation	1.36190041	0.237888438			
1294		-18.4	42.5	14.3		6.7	1.4	X		
						6.2	0.9			
						7.1	1.1			
						3.9	0.7			
						6.2	1.1			
						4.4	0.7			
						5.1	1			
						4.5	0.7			
						6.3	1.4			
						5.5	1.1			
						5.7	1			
						7.1	1.1			
					Average	5.725	1.016666667			
					Standard Deviation	1.06781425	0.240580107			
1295		-17.2	40.1	11.6		5.2	0.8	X		
						5.6	0.8			
						3.9	0.7			
						3.5	0.7			
						2.8	0.5			
						4	0.5			
						2.7	0.6			
						3.3	0.5			
						5.8	0.7			
						3.8	0.7			
						5.8	0.9			
						4.7	0.8			
					Average	4.258333333	0.683333333			
					Standard Deviation	1.131739075	0.133711585			

1296		-22.4	44.8	12		7.8	1	X		
						7.7	1.4			
						8.4	1.5			
						7.6	1.4			
						8.2	1.3			
						7.7	1.2			
						7.4	1			
						7.9	1.6			
						11	1.2			
						8.3	1.2			
						7.8	1.6			
						8.6	1.4			
					Average	8.2	1.31666667			
					Standard Deviation	0.951553753	0.203752672			
1297		-24.7	41.1	16.8		5.9	0.9	X		
						5.2	0.8			
						5	0.9			
						5.1	0.7			
						3.6	0.5			
						4.8	1.1			
						5.2	0.9			
						4.8	1.1			
						5.6	0.9			
						6.8	1			
						5.6	0.9			
						6.6	0.8			
					Average	5.35	0.875			
					Standard Deviation	0.852269697	0.16583124			
1298		-27.5	47.1	12.3		5.8	0.6	X		
						4.7	0.6			
						4.3	0.8			
						3.8	0.5			
						3.3	0.7			

						3.7	0.5			
						7.7	1			
						7	0.6			
						6	0.6			
						5	0.8			
						4.5	0.5			
						4.4	0.6			
					Average	5.016666667	0.65			
					Standard Deviation	1.352998914	0.150755672			
1299		-28.9	42.3	11.3		5.2	0.7	X		
						6.8	0.9			
						3.9	0.7			
						4.1	0.6			
						4.8	0.4			
						3.9	0.7			
						3.9	0.9			
						6.2	0.8			
						5.3	0.8			
						4.3	0.6			
						6.6	0.6			
						5.7	0.9			
					Average	5.058333333	0.716666667			
					Standard Deviation	1.078263194	0.152752523			
1300		-22.4	48.8	15.7		8.5	1	X		
						8.6	1.1			
						9.5	1.1			
						8.5	1			
						8.7	0.9			
						6.6	0.7			
						6	0.8			
						6.8	0.5			
						8.1	1			
						8.5	1.2			
						8.8	1.1			

						9.5	1.3			
					Average	8.175	0.975			
					Standard Deviation	1.119354522	0.222076973			
1301		-30.9	43.8	11.2		6.1	1	X		
						6	1			
						3.6	0.7			
						5.3	0.8			
						5	0.8			
						6.5	1.2			
						7	0.9			
						6.1	1			
						3.9	0.8			
						4.9	0.6			
						4.2	0.5			
						7.1	1.2			
					Average	5.475	0.875			
					Standard Deviation	1.178693421	0.217944947			
1302		-33.0	46.4	12		4.6	0.6	X		
						5.5	0.7			
						4.2	0.6			
						4.8	0.6			
						5.1	0.7			
						5.7	0.7			
						6	0.7			
						5.1	0.6			
						5.5	0.7			
						5.4	0.6			
						4.7	0.8			
						4.5	0.6			
					Average	5.091666667	0.658333333			
					Standard Deviation	0.543487615	0.066855792			
1303		-34.5	43.7	10.3		6.1	0.7	X		
						6	0.7			

						5.5	0.8			
						5.9	0.6			
						4.2	0.5			
						4.8	0.6			
						4.5	0.7			
						4.9	0.7			
						5.2	0.7			
						4.9	0.6			
						5.5	0.6			
						5.4	0.8			
					Average	5.241666667	0.666666667			
					Standard Deviation	0.600694043	0.088762536			
1304		-33.1	42.4	13.3		4.2	0.5	X		
						3.8	0.4			
						4.5	0.5			
						5.3	0.5			
						6.5	0.9			
						5.6	0.7			
						4.4	0.6			
						4.7	0.6			
						4.2	0.4			
						4.6	0.7			
						6.2	0.6			
						5.9	0.7			
					Average	4.991666667	0.591666667			
					Standard Deviation	0.880555954	0.144337567			
1305		-37.9	44.3	11.8		5.3	0.7	X		
						5.1	0.9			
						3.4	0.4			
						3.2	0.4			
						2.1	0.4			
						3.9	0.4			
						2.2	0.5			
						5.3	0.9			

						6.9	1.1			
						4.9	0.8			
						5.9	0.7			
						6	0.6			
					Average	4.516666667	0.65			
					Standard Deviation	1.539677259	0.239317211			
1306		-39.0	40.4	16		4.9	0.6	X		
						3.7	0.7			
						5.3	0.8			
						3.1	0.5			
						3.4	0.8			
						4	0.6			
						5.2	0.8			
						3.9	0.6			
						4.4	0.6			
						5.4	0.8			
						5.9	0.9			
						4.5	0.7			
					Average	4.475	0.7			
					Standard Deviation	0.878143703	0.120604538			
1307		-46.2	42.2	15.5		7	0.6	X		
						3.5	0.2			
						5.6	0.4			
						5.4	0.4			
						5.2	0.3			
						2.1	0.2			
						1.8	0.2			
						1.7	0.2			
						1.4	0.3			
						2.7	0.4			
						7.3	0.9			
						8	0.7			
					Average	4.308333333	0.4			
					Standard Deviation	2.396003617	0.22563043			

1308		-40.2	44.3	14.3		5.7	0.8	X		
						3.3	0.8			
						5.1	0.8			
						4	0.7			
						4.3	0.5			
						6.5	0.8			
						7.3	1.1			
						7.1	0.8			
						4.7	0.3			
						4.5	0.5			
						5.9	0.8			
						4.1	0.6			
					Average	5.208333333	0.708333333			
					Standard Deviation	1.288733228	0.206522433			
1309		-42.6	48.3	10.5		5.1	0.5	X		
						4.8	0.6			
						6.3	0.6			
						4	0.4			
						2.7	0.4			
						3.4	0.3			
						5.1	0.5			
						5.5	0.6			
						6.6	0.7			
						5.7	0.7			
						3.6	0.4			
						2.7	0.4			
					Average	4.625	0.508333333			
					Standard Deviation	1.330157202	0.131137217			
1310		-45.7	49.8	16.9		5.2	0.9	X		
						3	0.6			
						8.6	0.7			
						6.1	0.7			
						2.9	0.4			

						4.3	0.6			
						1.6	0.4			
						3.2	0.6			
						5	0.9			
						4.9	0.4			
						8.3	0.9			
						3.5	0.6			
					Average	4.71666667	0.64166667			
					Standard Deviation	2.134067109	0.188092498			
1311		-45.8	46.8	18.2		6.9	0.5	X		
						4.9	0.5			
						3.5	0.3			
						3.9	0.4			
						3.1	0.4			
						1.8	0.4			
						2.9	0.4			
						4.3	0.5			
						3.1	0.5			
						5.3	0.4			
						5.8	0.5			
						4.8	0.5			
					Average	4.19166667	0.44166667			
					Standard Deviation	1.426029665	0.066855792			
1312		-43.6	44.8	16.8		4.2	0.3	X		
						2.4	0.3			
						1.9	0.3			
						3.2	0.3			
						1	0.3			
						1.4	0.3			
						4.3	0.5			
						6.8	0.6			
						4.9	0.5			
						3.7	0.6			
						4.8	0.5			

						2	0.4			
					Average	3.383333333	0.408333333			
					Standard Deviation	1.71402415	0.124011241			
1313		-54.5	47.3	17.3		5.9	0.5	X		
						7.3	0.7			
						8.3	0.7			
						7.2	0.4			
						6.3	0.6			
						6.7	0.4			
						9.5	1.1			
						7.1	0.6			
						5.2	0.6			
						5.4	0.4			
						5.6	0.7			
						5	0.5			
					Average	6.625	0.6			
					Standard Deviation	1.346460005	0.195401684			
1314		-57.3	46.8	15		9.2	1.3	X		
						6.2	1.1			
						8.2	1.1			
						3	0.4			
						6.1	0.1			
						6	0.3			
						2.9	0.4			
						3.6	0.3			
						4.1	0.3			
						4	0.4			
						8.7	1			
						7.8	1.2			
					Average	5.816666667	0.658333333			
					Standard Deviation	2.281081615	0.437884031			
1315		-50.9	57.7	16.9		9	1.1	X		
						6	0.5			

						6.6	0.9			
						4.9	0.4			
						4.5	0.7			
						2.5	0.2			
						4.4	0.4			
						4.4	0.4			
						6.4	0.6			
						5.1	0.4			
						3.9	0.4			
						5.6	0.6			
					Average	5.275	0.55			
					Standard Deviation	1.635473243	0.250454133			
1316		-51.0	47.2	11.8		10.4	0.8	X		
						9.8	0.8			
						11.7	1			
						10.3	1.1			
						5	0.3			
						5.9	0.7			
						10.1	0.7			
						6.4	0.4			
						8.9	1.1			
						9.9	0.6			
						10	0.9			
						10.5	0.9			
					Average	9.075	0.775			
					Standard Deviation	2.114076201	0.252712557			
1317		-50.3	46.3	9.9		6.8	0.6	X		
						6.4	0.6			
						6.2	0.6			
						5.5	0.5			
						7.8	0.5			
						7.9	0.9			
						6.3	0.5			
						7.4	0.5			

						5.2	0.6			
						6.9	0.7			
						9.3	0.8			
						7	0.6			
					Average	6.891666667	0.616666667			
					Standard Deviation	1.119625208	0.126730446			
1318		-59.4	43.0	11.9		6.9	1.1	X		
						7.8	1			
						4.3	0.3			
						4.5	0.3			
						4.4	0.6			
						2	0.3			
						3.3	0.4			
						4.9	0.5			
						5.2	0.5			
						7.5	0.9			
						7.6	1			
						5.8	0.9			
					Average	5.35	0.65			
					Standard Deviation	1.825824845	0.30895719			
1319		-63.0	42.8	19.5		11.4	2.6	X		
						9	0.7			
						4.3	0.4			
						3.1	0.3			
						1.3	0.2			
						0.5	0.2			
						1.1	0.1			
						1.8	0.2			
						2.3	0.2			
						5	0.4			
						7.2	0.4			
						6.8	0.5			
					Average	4.483333333	0.516666667			
					Standard Deviation	3.472183838	0.676667413			

1320		-64.1	46.7	16.5		5.9	0.1	X		
						4.3	0.3			
						9.2	0.7			
						3.6	0.2			
						1.3	0.1			
						2.1	0.2			
						1.8	0.1			
						1.3	0.2			
						6	0.7			
						7.1	0.4			
						6.7	0.5			
						5.9	0.6			
					Average	4.6	0.341666667			
					Standard Deviation	2.595800805	0.231431644			
1321		-68.8	49.9	26.1		18.4	6.5	X		
						15.7	3.9			
						14	1.7			
						12.3	1.7			
						10.8	1.9			
						2.1	0.1			
						0.9	0.1			
						2.2	0.2			
						2.4	0.1			
						0.9	0.1			
						8.9	0.9			
						12.1	1.7			
					Average	8.391666667	1.575			
					Standard Deviation	6.368881496	1.927374568			
1322		-61.4	46.8	14		12.9	4.1	X		
						12	1.8			
						9	0.6			
						10.4	1.3			
						5	0.3			

						5.9	0.4			
						4.9	0.3			
						5.3	0.6			
						7.6	0.8			
						10.5	1.9			
						9.8	0.6			
						12.3	1.2			
					Average	8.8	1.158333333			
					Standard Deviation	2.977796623	1.07657566			
1323		-64.9	50.0	13.2		7.3	0.7	X		
						1.9	0.1			
						2.8	0.2			
						2.2	0.1			
						2.3	0.1			
						1.9	0.2			
						2.9	0.2			
						4.9	0.3			
						7.3	0.3			
						7.1	0.6			
						7.3	0.4			
						3.3	0.5			
					Average	4.266666667	0.308333333			
					Standard Deviation	2.341845944	0.202072594			
1324		-66.3	53.9	42.4		6.3	0.2	X		
						2	0.1			
						8.9	0.8			
						4.4	0.3			
						5	0.5			
						3.7	0.2			
						5.2	0.5			
						1.5	0.1			
						1.1	0.1			
						3.1	0.1			
						1.6	0.1			

						3.5	0.1			
					Average	3.858333333	0.258333333			
					Standard Deviation	2.280932159	0.227469612			
1325		-64.5	51.4	17.3		13.8	2.6	X		
						4.5	0.2			
						5.1	0.2			
						2.6	0.2			
						3	0.2			
						3.7	0.2			
						2.4	0.1			
						4.5	0.3			
						4.2	0.3			
						8	0.8			
						8.2	0.6			
						2.2	0.2			
					Average	5.183333333	0.491666667			
					Standard Deviation	3.350395725	0.693421469			
1326		-63.8	54.9	13		7.3	1.1	X		
						3.4	0.2			
						3.2	0.3			
						4.5	0.3			
						3.5	0.3			
						5.4	0.2			
						6.8	0.6			
						4.5	0.3			
						6.2	0.4			
						6	0.4			
						3.5	0.2			
						2.1	0.2			
					Average	4.7	0.375			
					Standard Deviation	1.630950643	0.256284643			
1327		-60.4	50.6	11.9		6.2	0.4	X		
						7.6	0.6			

						4	0.4			
						4.2	0.3			
						2.7	0.2			
						4.1	0.3			
						4.1	0.4			
						6.2	0.5			
						3.3	0.3			
						5.6	0.3			
						6.6	0.5			
						6.3	0.5			
					Average	5.075	0.391666667			
					Standard Deviation	1.526210399	0.116450015			
1328		-61.6	55.6	8.6		7.5	1	X		
						4.1	0.4			
						5	0.4			
						2.8	0.2			
						1.3	0.2			
						1.7	0.2			
						3.4	0.3			
						4.9	0.4			
						6.9	0.8			
						6.7	1.1			
						7.1	1.3			
						1	0.2			
					Average	4.366666667	0.541666667			
					Standard Deviation	2.357708184	0.398767039			
1329		-56.3	53.8	9.8		10.9	0.9	X		
						11.3	0.9			
						10	0.8			
						8.6	0.5			
						8.7	0.56			
						5.8	0.4			
						5.7	0.3			
						5.7	0.4			

						8.1	0.5			
						6.9	0.5			
						8.4	0.5			
						10.3	1			
					Average	8.366666667	0.605			
					Standard Deviation	2.014192071	0.231850265			
1330		-59.0	54.6	11		2.5	0.2	X		
						0.9	0.1			
						3.2	0.3			
						1.8	0.2			
						1.3	0.2			
						3.4	0.2			
						6.4	0.8			
						5.9	0.4			
						1.6	0.2			
						3.2	0.3			
						0.9	0.2			
						2.1	0.4			
					Average	2.766666667	0.291666667			
					Standard Deviation	1.802187223	0.183195541			
1331		-56.3	58.4	13.2		4.9	0.4	X		
						2.9	0.2			
						5.5	0.4			
						6.2	0.6			
						5.3	0.4			
						4.3	0.4			
						5.4	0.3			
						6.3	0.7			
						2.6	0.3			
						4.8	0.5			
						4.1	0.3			
						5.6	0.5			
					Average	4.825	0.416666667			
					Standard Deviation	1.17328211	0.140345893			

1332		-51.7	58.1	20.4		4.8	0.4	X		
						3.4	0.4			
						5.8	0.4			
						4.5	0.6			
						3.3	0.4			
						1.7	0.2			
						4.5	0.5			
						3.6	0.5			
						4.1	0.5			
						2.8	0.5			
						4.7	0.6			
						6.1	0.7			
					Average	4.108333333	0.475			
					Standard Deviation	1.239104026	0.128805703			
1333		-49.7	54.9	9.5		10.5	1.7	X		
						10.8	1.8			
						3.8	0.3			
						3.2	0.3			
						2.2	0.3			
						1.6	0.3			
						2.9	0.4			
						4.5	0.4			
						5.4	0.7			
						7.1	1.3			
						7.3	1			
						7.5	0.9			
					Average	5.566666667	0.783333333			
					Standard Deviation	3.087904065	0.558949231			
1334		-48.0	54.7	17.1		5.2	0.6	X		
						6.9	1			
						8.4	1			
						7.1	0.9			
						3.5	0.3			

						3.4	0.5			
						4.2	0.6			
						3.4	0.3			
						3.4	0.4			
						4.3	0.6			
						5.9	0.7			
						6.6	0.7			
					Average	5.191666667	0.633333333			
					Standard Deviation	1.747964184	0.242462118			
1335		-44.8	51.5	22.3		6.9	1	X		
						7	0.6			
						4.4	0.7			
						3.5	0.4			
						3.6	0.3			
						4.3	0.6			
						4.8	0.5			
						4.4	0.5			
						3.7	0.6			
						4.6	0.5			
						3.7	0.7			
						7.5	0.9			
					Average	4.866666667	0.608333333			
					Standard Deviation	1.434847685	0.197522534			
1336		-40.6	54.1	14.6		5.3	1	X		
						5.6	0.5			
						5.3	0.5			
						4.3	0.7			
						4.5	0.5			
						4.4	0.7			
						4.3	0.6			
						4.5	0.7			
						6	0.6			
						7.4	0.8			
						7.7	1.1			

						6.6	0.9			
					Average	5.491666667	0.716666667			
					Standard Deviation	1.209401304	0.199240984			
1337		-42.4	55.2	10.3		4.7	0.8	X		
						6.9	0.8			
						4	0.3			
						4.9	0.6			
						6	0.7			
						5.9	0.7			
						3.5	0.7			
						5.3	0.9			
						6.3	0.7			
						6.7	0.8			
						5.8	1			
						7.7	0.8			
					Average	5.641666667	0.733333333			
					Standard Deviation	1.222113172	0.172328087			
1338		-42.3	58.6	14.4		6.8	0.8	X		
						5.8	0.8			
						4.8	0.7			
						4.9	0.6			
						4.2	0.6			
						3.9	0.7			
						7.1	1			
						6	0.8			
						6.1	0.6			
						5	0.6			
						9.3	1.2			
						6.7	0.7			
					Average	5.883333333	0.758333333			
					Standard Deviation	1.489864749	0.183195541			
1339		-38.5	58.2	11.4		5.3	0.8	X		
						9	0.8			

						8.1	0.6			
						5.9	0.5			
						5.5	0.5			
						5.4	0.4			
						4.1	0.3			
						5.7	0.3			
						5.2	0.3			
						6.3	0.7			
						6.7	0.4			
						6.9	0.6			
					Average	6.175	0.516666667			
					Standard Deviation	1.344432966	0.185047087			
1340		-37.1	55.7	17		8.4	1.1	X		
						8.4	0.9			
						6.4	0.6			
						5.6	0.5			
						4.5	0.2			
						3.4	0.4			
						4.4	0.5			
						3.8	0.4			
						4.2	0.5			
						4.9	0.5			
						5.8	0.7			
						5.6	0.6			
					Average	5.45	0.575			
					Standard Deviation	1.631229319	0.237888438			
1341		-33.7	57.2	21.6		5.1	0.5	X		
						5.7	0.4			
						3.5	0.3			
						3.8	0.4			
						3.9	0.3			
						3.2	0.3			
						3.5	0.4			
						3.7	0.4			

						4.1	0.4			
						4	0.4			
						5.6	0.5			
						5.5	0.5			
					Average	4.3	0.4			
				Standard Deviation		0.910544293	0.073854895			
1342		-31.8	51.6	8.1		6.3	0.4	X		
						5.6	0.4			
						6.3	0.2			
						5.3	0.4			
						6.8	0.5			
						6.4	0.3			
						4.8	0.2			
						4.5	0.1			
						4.7	0.1			
						5.5	0.2			
						7.2	0.7			
						6.5	0.4			
					Average	5.825	0.325			
				Standard Deviation		0.883304745	0.17645499			
1343		-34.7	50.6	22.1		5.7	0.5	X		
						5	0.4			
						4.3	0.6			
						3.9	0.7			
						3.6	0.3			
						3	0.4			
						3.6	0.3			
						3.6	0.5			
						3.9	0.5			
						5.1	0.4			
						4.6	1			
						4.6	0.7			
					Average	4.241666667	0.525			
				Standard Deviation		0.780976467	0.200567377			

1344		-39.1	52.5	19.2		5.8	0.4	X		
						6.3	0.6			
						4.1	0.5			
						4.2	0.6			
						3.9	0.5			
						8.7	1.2			
						4.5	0.5			
						4.9	0.6			
						5.1	0.4			
						3.7	0.5			
						5.4	0.8			
						5.4	1.1			
					Average	5.166666667	0.641666667			
					Standard Deviation	1.369361718	0.260971379			
1345		-30.2	53.1	27.8		4.1	0.4	X		
						4.8	0.4			
						3	0.3			
						3.3	0.3			
						4.3	0.5			
						4.1	0.5			
						4.5	0.4			
						6.3	0.6			
						5.1	0.4			
						5.3	0.4			
						3.9	0.4			
						4.5	0.5			
					Average	4.433333333	0.425			
					Standard Deviation	0.888648958	0.08660254			
1346		-25.7	52.1	11		6.4	0.7	X		
						6.8	0.7			
						5.5	0.7			
						5	0.6			
						5.4	0.6			

						5.1	0.6			
						6.1	0.6			
						5.1	0.5			
						4.7	0.7			
						6.5	0.8			
						6.9	0.9			
						7.1	0.7			
					Average	5.883333333	0.675			
					Standard Deviation	0.844052275	0.105528971			
1347	Biot	-22.7	51.0	13		7.7	1	X	X	
						8.3	0.9			
						7.3	0.9			
						7	0.9			
						6.9	0.7			
						7.1	0.9			
						6.8	1			
						6.9	0.7			
						5.9	0.8			
						5.8	0.6			
						6.6	0.8			
						7.3	0.9			
					Average	6.966666667	0.841666667			
					Standard Deviation	0.689312349	0.124011241			
1348		-27.4	54.8	8.1		4.8	0.5	X		
						6.8	1			
						5.1	0.5			
						5.8	0.6			
						6.2	0.7			
						5.8	0.5			
						4.7	0.8			
						4.5	0.6			
						5.5	0.7			
						4.4	0.6			
						3.9	0.4			

						5.2	0.4			
					Average	5.225	0.608333333			
					Standard Deviation	0.831346115	0.172986249			
1349		-28.0	51.4	12.8		4.2	0.7	X		
						6.6	0.7			
						6	0.6			
						5.2	0.6			
						5.7	0.6			
						5.1	0.6			
						4.8	0.5			
						5.4	0.7			
						6.3	0.8			
						5.6	0.7			
						5.3	0.6			
						6.5	0.9			
					Average	5.558333333	0.666666667			
					Standard Deviation	0.712815587	0.107308674			
1350		-24.8	50.7	8.5		6	0.9	X		
						5.2	0.7			
						6.3	0.7			
						5.9	0.7			
						6	0.8			
						5.8	0.7			
						4.9	0.7			
						6.2	0.6			
						5.8	0.8			
						5.6	0.8			
						5.7	0.8			
						5.2	0.6			
					Average	5.716666667	0.733333333			
					Standard Deviation	0.42604595	0.088762536			
1351		-19.9	56.8	33.5		7.7	0.7	X		
						8.8	0.8			

						11.2	0.7			
						6.6	0.6			
	(In a clearly defines Mare area, geomorphologically but gives Highland readings Fe and Ti - must imply very shallow basalt coverage over anorthosite or similar material.)					5.6	0.6			
						6.4	0.6			
						5.7	0.5			
						5.7	0.4			
						5.5	0.6			
						5.6	0.4			
						6.4	0.6			
						7.9	0.8			
					Average	6.925	0.608333333			
					Standard Deviation	1.720002643	0.131137217			
1352		-17.6	55.2	7.8		11	1.7		X	
						11.7	1.6			
						12.5	1.8			
						12.8	1.4			
						11.9	1.4			
						10.7	1.3			
						10.7	1.9			
						1.3	1.3			
						8	0.9			
						12.2	1.4			
						10.3	1.9			
						11	1.3			
					Average	10.34166667	1.491666667			
					Standard Deviation	3.115783378	0.296826651			
1353		-15.4	57.8	5.8		11.6	2		X	
						12	1.8			
						11.5	1.7			
						10.9	2			
						10.5	1.4			
						11.6	2.1			
						13.1	1			
						11.4	1.8			

						11.6	1.8			
						11.5	1.9			
						11.8	2.3			
						10.7	2.1			
					Average	11.51666667	1.825			
					Standard Deviation	0.669916322	0.346738046			
1354		-10.4	55.7	9		15.9	3.3		X	
						16	2.8			
						15	2.6			
						15.3	2.9			
						15.6	2.9			
						15.8	3			
						16	2.6			
						16	3.3			
						15.3	2.8			
						15.5	3.3			
						14.6	2.8			
						15.5	3.2			
					Average	15.54166667	2.958333333			
					Standard Deviation	0.439955232	0.260971379			
1355	Lindbergh	-5.4	52.8	12.7		17.2	5.4		X	
						16.8	4.7			
						15.5	3.7			
						17.3	5			
						14.4	3.5			
						17.3	6.9			
						16.7	5.1			
						16.7	5.2			
						16.9	5.4			
						16.8	4.9			
						17.1	6.2			
						16.1	5.1			
					Average	16.56666667	5.091666667			
					Standard Deviation	0.856348839	0.922898924			

1356		-2.2	59.3	10.3		13.1	3.6		X	
						13.3	2.9			
						13.7	3.6			
						13.4	3.3			
						14.7	3.3			
						13.9	3.4			
						15	2.9			
						15.4	3.6			
						15.4	3.8			
						14.6	4			
						13.9	3.6			
						12.6	3			
					Average	14.08333333	3.416666667			
					Standard Deviation	0.925235433	0.351188458			
1357		-0.9	58.2	7.5		14.7	4.3		X	
						15.1	5.4			
						14.6	3.8			
						14	3.6			
						15	4.7			
						14.6	3.9			
						16.4	3.9			
						14.3	5.2			
						14.6	4.9			
						14.6	4.6			
						14.6	4.5			
						15	4.1			
					Average	14.79166667	4.408333333			
					Standard Deviation	0.590005136	0.574390322			
1358	Ibn Battuto	-6.9	50.3	12.1		16.8	7		X	
						16.8	6			
						16.5	5.8			
						16.4	5.9			
						16.2	5.9			

						17.2	6.5			
						17.7	8.5			
						16.6	3.5			
						17	6.4			
						16.3	7.7			
						17	6			
						16.8	6.4			
					Average	16.775	6.3			
					Standard Deviation	0.420227211	1.203781919			
1359	Born	-6.1	66.6	17.9		6.9	0.8	X		
						6.8	1			
						6.3	0.9			
						7.4	1.1			
						8.8	0.9			
						7.9	1.2			
						7.4	1			
						7.6	1.1			
						8.1	1.1			
						6.2	0.7			
						7.9	0.8			
						7	0.9			
					Average	7.358333333	0.958333333			
					Standard Deviation	0.762124224	0.150504203			
1360		-9.0	65.6	10		5.3	0.8	X		
				average		5.2	0.7			
	oblong shape					4.1	0.7			
						5.1	0.6			
						5.1	0.7			
						6.2	0.9			
						6.1	1			
						5.8	0.7			
						6	0.8			
						5.1	0.9			
						5.7	0.8			

						4.7	0.8			
					Average	5.366666667	0.783333333			
					Standard Deviation	0.61987291	0.111464086			
1361		-7.4	69.5	14.9		5.5	1	X		
						7.3	1.1			
						6.7	1.1			
						7.2	1			
						7.5	1.1			
						7.6	1			
						8.5	1			
						8.2	0.9			
						7	0.8			
						7.1	0.9			
						7.2	0.8			
						7	1.1			
					Average	7.233333333	0.983333333			
					Standard Deviation	0.748736309	0.111464086			
1362		-0.3	67.7	7.4		14.1	2.1	X		
						14.7	2.6			
						15.1	2.5			
						15.1	2.6			
						14.7	2.3			
						15	1.9			
						15.3	1.8			
						14.5	2.3			
						14.7	2.6			
						14.6	2.4			
						14.8	2.2			
						14.5	2.3			
					Average	14.75833333	2.3			
					Standard Deviation	0.328794861	0.266287609			
1363		-15.3	61.4	8.7		10	1.8	X		
						10.2	1.8			

						10.1	1.5			
						9.6	2			
						8.1	1.3			
						10.7	1.2			
						9.2	1.8			
						10.5	2.2			
						11.4	1.9			
						10.2	1.8			
						9.8	1.9			
						8.6	1.8			
					Average	9.86666667	1.75			
					Standard Deviation	0.90386376	0.284445234			
1364		-18.5	61.9	12.1		10.5	1.3		X	
						10.7	1.7			
						11.3	1.7			
						10.6	1.4			
						10.3	1.3			
						9.9	1.5			
						9.6	1.4			
						9.4	1.3			
						10.4	1.5			
						9.9	1.4			
						10	1.4			
						10.6	1.4			
					Average	10.26666667	1.441666667			
					Standard Deviation	0.529722626	0.137895437			
1365		-19.4	67.0	8.3		7.2	1		X	
						7.4	1			
						7.2	0.9			
						7.7	1.1			
						6.8	0.8			
						6.1	1.1			
						7.1	0.9			
						7.1	1			

						7.3	1.1			
						7.3	1.1			
						8.2	1.1			
						7.5	1			
					Average	7.241666667	1.008333333			
					Standard Deviation	0.501739399	0.099620492			
1366		-14.5	64.8	8		7.8	1.1	X		
						8.3	1.3			
						8.5	1.3			
						8.1	1.3			
						8.1	1.3			
						7.8	1.1			
						8.8	1.1			
						8.3	1			
						8.6	1.2			
						8.2	1.2			
						9	1.1			
						8.2	1.3			
					Average	8.308333333	1.191666667			
					Standard Deviation	0.365459445	0.108362467			
1367		-12.9	67.0	12.3		7.4	1	X		
						7.2	1			
						7.3	1.2			
						6.1	0.9			
						6.5	0.9			
						7.7	0.9			
						4.7	0.7			
						7.2	0.8			
						7.1	0.8			
						7.9	1.1			
						6.9	0.9			
						7.3	0.9			
					Average	6.941666667	0.925			
					Standard Deviation	0.855419443	0.135680105			

1368		-29.1	62.7	15.5		5.5	0.8	X		
						6.7	0.9			
						6.2	0.6			
						5	0.5			
						4.9	0.5			
						5.1	0.7			
						4.7	0.5			
						5.3	0.6			
						5.6	0.8			
						6.7	0.8			
						6.9	0.9			
						5.3	0.9			
					Average	5.658333333	0.708333333			
					Standard Deviation	0.770428846	0.162135372			
1369		-26.4	68.2	37.2		6.4	0.6	X		
						5.3	0.3			
						6.7	0.6			
						4.2	0.4			
						4.3	0.5			
						5.1	0.6			
						4.5	0.5			
						3.5	0.5			
						4.8	0.5			
						5.5	0.5			
						5.7	0.6			
						7.8	0.7			
					Average	5.316666667	0.525			
					Standard Deviation	1.205919742	0.105528971			
1370		-26.2	61.5	6.6		4.5	0.4	X		
						4.7	0.6			
						3.9	0.6			
						4.2	0.7			
						3.8	0.7			

						4.3	0.6			
						3.5	0.7			
						4.2	0.6			
						4.7	0.6			
						4.5	0.7			
						5.1	0.7			
						4.7	0.7			
					Average	4.341666667	0.633333333			
					Standard Deviation	0.452183256	0.088762536			
1371		-29.4	67.3	7.1		6.1	0.8	X		
						5.5	0.6			
						4.6	0.5			
						3.7	0.3			
						4.1	0.5			
						5.2	0.5			
						5.1	0.6			
						4.5	0.6			
						4.9	0.6			
						4.7	0.5			
						3.6	0.3			
						4.9	0.5			
					Average	4.741666667	0.525			
					Standard Deviation	0.719164077	0.135680105			
1372		-21.1	63.0	8.8		10.1	1.2	X		
						10.1	1.6			
						10.4	1.3			
						10.1	1.4			
						10	1.6			
						9.1	1.5			
						8.9	1.1			
						10.6	1.5			
						9.6	1.2			
						10.3	1.7			
						9.9	1.3			

						10.2	1.6			
					Average	9.941666667	1.416666667			
					Standard Deviation	0.507145906	0.194624736			
1373		-23.7	68.3	6.3		8.4	1.4	X		
						8.9	0.9			
						8.7	1			
						10.2	0.9			
						9.3	1.1			
						9.2	1			
						8.9	0.9			
						7.7	1			
						9	1.1			
						8.1	1			
						7.6	1			
						8.8	0.8			
					Average	8.733333333	1.008333333			
					Standard Deviation	0.719006048	0.150504203			
1374		-34.9	63.7	28.1		4.3	0.6	X		
						6.3	0.8			
						5.6	0.7			
						5.5	0.7			
						3.7	0.5			
						4.5	0.5			
						4.5	0.4			
						5.5	0.5			
						5.5	0.7			
						6.4	0.8			
						4.6	0.7			
						4.9	1.1			
					Average	5.108333333	0.666666667			
					Standard Deviation	0.824023757	0.187487373			
1375		-30.3	70.2	7.2		7.1	0.9	X		
						5.1	0.7			

						5.7	0.7			
						5.2	0.6			
						4.4	0.7			
						4.8	0.6			
						4.5	0.6			
						4.1	0.6			
						4.2	0.5			
						7.5	0.9			
						6.1	0.9			
						7.1	0.9			
					Average	5.483333333	0.716666667			
					Standard Deviation	1.210434432	0.14668044			
1376		-37.9	62.7	10.6		5.9	0.7	X		
						5	0.4			
						4.6	0.7			
						3.9	0.5			
						4.3	0.7			
						7	0.7			
						6.7	0.8			
						4.6	0.7			
						5.4	0.7			
						6.5	0.7			
						5.5	0.9			
						5	0.8			
					Average	5.366666667	0.691666667			
					Standard Deviation	0.989337091	0.131137217			
1377		-36.0	65.3	11		4.4	0.6	X		
						6.5	0.8			
						5.4	0.7			
						4.3	0.6			
						5.6	0.7			
						5	0.8			
						5.5	0.6			
						5.1	0.7			

						5.5	0.7			
						5	0.6			
						4.5	0.6			
						7.4	0.6			
					Average	5.35	0.66666667			
					Standard Deviation	0.887796045	0.077849894			
1378		-35.8	60.8	5.5		4.2	0.9	X		
						5.1	0.7			
						5.2	0.7			
						5.2	0.6			
						5.4	0.8			
						3.4	0.5			
						4.3	0.3			
						4.6	0.5			
						6	0.8			
						4.8	0.8			
						5.8	0.6			
						5.2	0.6			
					Average	4.933333333	0.65			
					Standard Deviation	0.724045872	0.167874412			
1379		-39.9	58.8	16.3		5.3	0.7	X		
		25% of data missing in blank area				8.4	1			
						4	0.6			
						3.6	0.5			
						4.5	0.5			
						3.7	0.5			
						3.5	0.5			
						5.2	0.6			
						3.8	0.4			
						4.4	0.5			
						4.8	0.6			
						4.3	0.6			
					Average	4.625	0.583333333			
					Standard Deviation	1.330840473	0.152752523			

1380		-44.1	66.1	7.8		3.8	0.4	X		
						2.9	0.3			
						3.2	0.7			
						4.9	0.6			
						3.5	0.5			
						2.9	0.6			
						2.9	0.5			
						2.7	0.5			
						3.2	0.4			
						3	0.4			
						3.6	0.4			
						3.1	0.5			
					Average	3.308333333	0.483333333			
					Standard Deviation	0.597659577	0.111464086			
1381		-47.2	64.9	12.5		6.9	0.7	X		
						7.1	0.8			
						7.6	0.8			
						6.7	0.7			
						2.3	0.3			
						3.3	0.4			
						3.7	0.4			
						3.1	0.5			
						2.5	0.3			
						3.2	0.4			
						5.1	0.4			
						7.5	0.6			
					Average	4.916666667	0.525			
					Standard Deviation	2.106627349	0.186474468			
1382		-49.2	62.0	12.6		4.3	0.7	X		
						6.5	0.5			
						5.4	0.3			
						4.3	0.5			
						3.3	0.3			

						1.8	0.3			
						2.2	0.3			
						1.5	0.2			
						1.4	0.3			
						3.3	0.2			
						2.2	0.3			
						6.6	0.5			
					Average	3.566666667	0.366666667			
					Standard Deviation	1.8636881	0.149747262			
1383		-43.1	64.7	10.4		4.6	0.6	X		
						2.7	0.5			
						4.4	0.6			
						4.8	0.6			
						4	0.6			
						4.2	0.6			
						3.4	0.5			
						4.4	0.5			
						3.5	0.5			
						5.5	0.5			
						6.5	0.6			
						4.6	0.5			
					Average	4.383333333	0.55			
					Standard Deviation	0.988877539	0.052223297			
1384		-47.8	62.6	9.9		6.9	1.1	X		
						6.2	0.7			
						5.5	1			
						3.9	0.4			
						3.6	0.3			
						4.4	0.4			
						4.7	0.3			
						3.8	0.4			
						3.9	0.5			
						4	0.5			
						7.4	0.7			

						6.3	0.7			
					Average	5.05	0.58333333			
					Standard Deviation	1.348062583	0.262274434			
1385		-50.1	66.4	7.5		4.3	0.7	X		
						7.2	1.3			
						4.3	0.5			
						5.5	1			
						6.7	0.8			
						6.1	0.7			
						5.6	0.7			
						7.9	1.2			
						5.6	0.4			
						5.1	0.7			
						7.1	0.8			
						6	0.8			
					Average	5.95	0.8			
					Standard Deviation	1.123711383	0.259369866			
1386		-56.6	66.8	8		7.5	0.9	X		
						9.7	1.7			
						5.8	0.6			
						3.4	0.4			
						3	0.4			
						1.2	0.3			
						0.5	0.2			
						0.4	0.2			
						2.7	0.4			
						5.9	0.6			
						6.3	0.6			
						6.8	0.6			
					Average	4.43333333	0.575			
					Standard Deviation	2.993427143	0.407040315			
1387		-57.7	62.5	18.8		6.6	0.5	X		
						6.2	0.5			

						8.2	0.9			
						8.8	0.7			
						0.9	0.2			
						1.5	0.2			
						0.5	0.2			
						0.1	0.2			
						0.4	0.2			
						1.7	0.2			
						3.3	0.4			
						7.1	0.7			
					Average	3.775	0.408333333			
					Standard Deviation	3.348575002	0.250302847			
1388		-58.7	65.9	8.1		2.3	0.3	X		
						4.5	0.5			
						1.9	0.4			
						2.3	0.2			
						2	0.2			
						1.3	0.2			
						2.9	0.3			
						6	0.3			
						4.3	0.4			
						3	0.5			
						2.2	0.3			
						3.5	0.3			
					Average	3.016666667	0.325			
					Standard Deviation	1.345587627	0.105528971			
1389		-53.6	61.5	5.3		6	0.5	X		
						3.3	0.5			
						2.5	0.3			
						2.3	0.2			
						2.5	0.2			
						3.2	0.2			
						8.3	1.4			
						9.1	1			

						6.4	0.5			
						5.8	0.6			
						5.3	0.4			
						4.5	0.4			
					Average	4.933333333	0.516666667			
					Standard Deviation	2.286455508	0.356328075			
1390		-61.7	63.9	42.3		5.8	0.9	X		
						2.2	0.2			
						7.6	0.6			
						3.3	0.2			
						0.9	0.1			
						2	0.1			
						2	0.2			
						0.2	0.1			
						0.6	0.2			
						7.3	0.6			
						6.5	0.4			
						5.2	0.5			
					Average	3.633333333	0.341666667			
					Standard Deviation	2.705325836	0.257464325			
1391		-64.9	67.9	24.6		10.1	1.3	X		
						7	0.5			
						2.7	0.3			
						3	0.4			
						1.1	0.3			
						1.1	0.2			
						1.4	0.2			
						4.6	0.5			
						8.6	1.3			
						12.3	1.7			
						9.4	1.1			
						3.8	0.5			
					Average	5.425	0.691666667			
					Standard Deviation	3.904804733	0.514266173			

1392		-67.8	68.2	10.5		13.1	3	X		
						11.8	3.4			
						12.7	3.6			
						4.7	0.9			
						4.1	0.4			
						5.7	0.7			
						6.4	0.5			
						7.1	1.3			
						6.5	0.9			
						14.9	3.3			
						17.9	6.3			
						15.4	4.4			
					Average	10.025	2.391666667			
					Standard Deviation	4.774196743	1.883641702			
1393		-69.6	61.6	15.4		1.6	0.2	X		
						1.2	0.1			
						0.8	0.1			
						0.7	0.1			
						0.7	0.1			
						2.4	0.1			
						1.3	0.2			
						0.2	0.2			
						2.7	0.2			
						1	0.2			
						4.4	0.2			
						19.4	10.5			
					Average	3.033333333	1.016666667			
					Standard Deviation	5.28038107	2.986890549			
1394		-64.5	64.6	20.9		7.5	0.9	X		
						7	0.6			
						7.2	0.8			
						5.3	0.8			
						3.1	0.4			

						2	0.3			
						0.5	0.3			
						3.5	0.2			
						4.8	1			
						5.7	0.5			
						4.8	0.4			
						4.2	0.4			
					Average	4.633333333	0.55			
					Standard Deviation	2.129589518	0.264575131			
1395		-68.1	71.7	10.1		12	2.9	X		
						7.6	0.7			
						8	0.7			
						1.8	0.2			
						0.6	0.2			
						6.6	1.1			
						8.3	1.3			
						1.9	0.1			
						7	0.5			
						7.3	0.8			
						5.6	0.4			
						3.8	0.2			
					Average	5.875	0.758333333			
					Standard Deviation	3.293554311	0.772785203			
1396		-66.4	75.3	8.7		8.3	1.3	X		
						5.9	0.6			
						7.7	1.4			
						1.8	0.1			
						1.8	0.3			
						1.9	0.2			
						1.3	0.1			
						5	0.6			
						8.9	1.1			
						8.4	1.2			
						9	0.9			

						7.2	1			
					Average	5.6	0.733333333			
					Standard Deviation	3.105127724	0.479267117			
1397		-62.5	72.0	13.4		12	1.6	X		
						4.6	0.6			
						5.4	0.4			
						1.1	0.2			
						0.5	0.2			
						1.5	0.2			
						1.4	0.2			
						0.3	0.3			
						6	0.5			
						11.3	1.9			
						8.5	0.9			
						11	0.5			
					Average	5.3	0.625			
					Standard Deviation	4.471526077	0.569090183			
1398		-63.4	72.8	14.5		7	0.7	X		
						7.1	1.3			
						4.7	0.4			
						0.8	0.1			
						3.7	0.2			
						3.7	0.3			
						1.8	0.2			
						3.6	0.4			
						9	0.9			
						8.3	0.9			
						8.1	0.5			
						1.7	0.2			
					Average	4.958333333	0.508333333			
					Standard Deviation	2.845876869	0.367938565			
1399		-60.2	71.2	11.5		8	0.9	X		
						2.5	0.2			

						3	0.3			
						0.2	0.1			
						1.1	0.2			
						0.6	0.2			
						0.4	0.2			
						2	0.2			
						7.9	0.6			
						8	0.9			
						4	0.6			
						3.4	0.5			
					Average	3.425	0.408333333			
					Standard Deviation	2.988196476	0.284312035			
1400		-59.3	72.6	18.5		3.9	0.8	X		
						3	0.5			
						3	0.3			
						1.2	0.2			
						1.9	0.3			
						0.2	0.3			
						0.1	0.1			
						0.2	0.2			
						2.8	0.3			
						5.8	0.5			
						2.9	0.4			
						2	0.5			
					Average	2.25	0.366666667			
					Standard Deviation	1.691959595	0.187487373			
1401		-58.0	70.4	15		5.2	0.5	X		
						9.2	0.6			
						4.5	0.5			
						1.8	0.3			
						0.7	0.3			
						0.2	0.2			
						1	0.2			
						4	0.3			

						6.5	0.6			
						5.8	0.3			
						5.1	0.7			
						3.4	0.5			
					Average	3.95	0.41666667			
					Standard Deviation	2.678703893	0.169669911			
1402		-55.3	70.1	9.5		5.5	0.8	X		
						6.9	0.8			
						5.5	0.3			
						1.9	0.6			
						2.4	0.5			
						1.8	0.4			
						2.4	0.5			
						2.7	0.4			
						4	0.5			
						4.9	0.6			
						4.4	0.5			
						3.7	0.4			
					Average	3.84166667	0.525			
					Standard Deviation	1.643974305	0.154478595			
1403		-59.1	77.6	20		8.3	0.9	X		
						5.4	0.5			
						3.5	0.3			
						2	0.5			
						2.4	0.2			
						1.2	0.4			
						8.2	0.8			
						10.8	1.7			
						7.4	0.6			
						4.6	0.4			
						4.2	0.6			
						2	0.3			
					Average	5	0.6			
					Standard Deviation	3.059114548	0.402266307			

1404		-55.0	78.1	6.9		13.8	1.2		X	
						14.5	1.4			
						14.5	1.2			
						14.1	1.7			
						12.5	1.1			
						12.4	0.8			
						11.8	1.2			
						10.3	0.8			
						13.6	1.2			
						13.8	1.5			
						14.2	1.3			
						13.8	1.4			
					Average	13.275	1.233333333			
					Standard Deviation	1.274309082	0.260535579			
1405		-50.5	79.8	18.1		8	1.1		X	
						6.8	0.8			
						7.4	1.1			
						4.5	0.1			
						5.5	0.8			
						3.7	0.7			
						6.8	0.6			
						8.1	1.1			
						4.9	0.7			
						5.6	0.5			
						7.7	0.8			
						8.1	1			
					Average	6.425	0.775			
					Standard Deviation	1.535711265	0.292714568			
1406		-49.6	74.7	8.8		13	1.6		X	
						11.4	1.4			
						10.6	1.4			
						9.1	1.8			
						6.7	1.1			

						7	1.1			
						5.6	1.2			
						7.9	1			
						10.1	1.1			
						13.3	1.3			
						12.1	1.9			
						11.9	1.7			
					Average	9.891666667	1.383333333			
					Standard Deviation	2.603654192	0.304013556			
1407		-49.4	73.1	8.4		7.7	0.8	X		
						9.8	1.4			
						9.2	1			
						8.2	1.3			
						6.3	1			
						6.9	1			
						6.8	1.1			
						3.7	0.5			
						5.8	0.8			
						5.2	0.7			
						6.6	0.8			
						7.9	0.9			
					Average	7.008333333	0.941666667			
					Standard Deviation	1.69730178	0.250302847			
1408		-41.9	75.2	8.8		7.7	0.7	X		
						7.4	1			
						3.2	0.4			
						3.7	0.5			
						5.1	0.5			
						4.7	0.6			
						5.1	0.5			
						6.8	0.7			
						7.8	0.8			
						7.9	0.9			
						7.7	0.9			

						6.8	1			
					Average	6.158333333	0.708333333			
					Standard Deviation	1.705850006	0.210878394			
1409		-40.2	77.4	16.1		7.5	1.1	X		
						8.4	1.2			
						7.8	1.2			
						5.6	0.9			
						5.1	0.5			
						6.5	0.8			
						2.5	0.5			
						2.1	0.4			
						4.1	0.6			
						8.5	1.2			
						7.4	1			
						9.9	1.6			
					Average	6.283333333	0.916666667			
					Standard Deviation	2.449427886	0.366391081			
1410		-42.8	77.8	10.1		8.2	1	X		
						8.3	1			
						9.3	1.4			
						6.5	1			
						9.3	1			
						8.5	1.2			
						7.1	1.1			
						7.6	1.5			
						7.1	0.9			
						9.2	1.5			
						8.9	1.4			
						6.7	0.9			
					Average	8.058333333	1.158333333			
					Standard Deviation	1.030849899	0.231431644			
1411		-37.5	77.6	15.7		8	0.8	X		
						8.2	1.1			

						5.4	0.7			
						4.9	0.7			
						5.6	0.6			
						4	0.6			
						4.2	0.6			
						5.9	0.7			
						4.7	0.6			
						6.7	0.9			
						6.7	0.8			
						8.2	0.9			
					Average	6.041666667	0.75			
					Standard Deviation	1.516849806	0.15666989			
1412		-39.9	73.0	27.5		8.9	0.8	X		
						6.5	0.6			
						6.8	0.6			
						5	0.5			
						3.3	0.5			
						3.5	0.4			
						3.3	0.4			
						2	0.4			
						2.5	0.5			
						6	0.7			
						5.6	0.8			
						7.9	0.9			
					Average	5.108333333	0.591666667			
					Standard Deviation	2.207614234	0.172986249			
1413		-33.9	78.3	26.5		6.7	0.8	X		
						4.1	0.8			
						6	0.9			
						5.1	0.7			
						4.8	0.6			
						3.7	0.5			
						5	0.7			
						5.4	0.7			

						6.3	0.6			
						6.8	0.9			
						7.6	1			
						7.1	1			
					Average	5.71666667	0.76666667			
					Standard Deviation	1.226104944	0.161432977			
1414		-32.4	77.9	8.8		5.6	0.5	X		
						6.7	0.6			
						5.2	0.6			
						5.1	0.4			
						4.2	0.4			
						4.3	0.4			
						3.4	0.3			
						5.1	0.4			
						4.3	0.2			
						7	0.6			
						6.7	0.7			
						6.9	0.5			
					Average	5.375	0.46666667			
					Standard Deviation	1.217392892	0.143548113			
1415		-30.4	72.1	9.7		5.5	0.8	X		
						6.2	0.7			
						5.4	0.8			
						7.7	1.1			
						7.7	1.3			
						5.1	0.9			
						4.8	0.6			
						4.4	0.8			
						5.7	0.6			
						4.6	0.7			
						4.9	0.5			
						3.9	0.8			
					Average	5.49166667	0.8			
					Standard Deviation	1.198831502	0.221564684			

1416		-27.5	70.3	5.7		3.5	0.5	X		
						5.1	0.6			
						4.2	0.4			
						4.5	0.6			
						5.6	0.4			
						6.9	0.5			
						11.4	0.8			
						9.4	0.6			
						10.1	0.7			
						6.8	0.6			
						3.9	0.4			
						3.9	0.5			
				Average		6.275	0.55			
				Standard Deviation		2.690091245	0.124316312			
1417		-27.6	75.5	5.3		2.8	0.6	X		
						3.5	0.6			
						3.8	0.8			
						4.3	0.7			
						2.2	0.6			
						2.8	0.4			
						3	0.6			
						4.6	0.8			
						6.2	0.8			
						6.3	1.1			
						3.2	0.7			
						3.4	0.8			
				Average		3.841666667	0.708333333			
				Standard Deviation		1.303462754	0.172986249			
1418		-27.2	73.4	14.9		8.4	0.9	X		
						7.5	0.8			
						7.5	0.9			
						6.8	0.9			
						7.4	1			

						6.8	1			
						5.5	1			
						6.1	0.7			
						7.2	0.9			
						8.1	1.3			
						7.9	1.1			
						7.7	1			
					Average	7.241666667	0.958333333			
					Standard Deviation	0.831710541	0.150504203			
1419		-22.0	78.9	6.7		5	0.7	X		
						2.8	0.6			
						3.2	0.5			
						3.3	0.4			
						2.5	0.4			
						3.5	0.6			
						3.2	0.5			
						4.5	0.6			
						3.1	0.6			
						2.6	0.6			
						2.7	0.6			
						1.4	0.6			
					Average	3.15	0.558333333			
					Standard Deviation	0.929809365	0.090033664			
1420		-18.5	72.5	15.1		7.4	0.8	X		
						5.4	0.8			
						6.3	0.8			
						6.1	0.8			
						5.7	0.8			
						5.3	0.9			
						7.1	0.9			
						7.6	0.9			
						7	0.9			
						5	0.5			
						6.4	1			

						7.4	0.9			
					Average	6.391666667	0.833333333			
					Standard Deviation	0.907001387	0.123091491			
1421		-16.4	75.9	13.7		6.3	1	X		
						6.1	0.8			
						5.2	1			
						5.4	1.1			
						5.2	0.8			
						5.5	0.8			
						5.5	1			
						5.3	1			
						4.3	0.8			
						7.2	1			
						6.4	0.9			
						4.8	0.8			
					Average	5.6	0.916666667			
					Standard Deviation	0.782768978	0.111464086			
1422		-16.1	73.4	9.7		6.5	0.9	X		
						5.2	0.7			
						5.2	0.5			
						5.6	0.7			
						4.2	0.5			
						3.4	0.6			
						4.7	0.6			
						4.6	0.8			
						5.9	0.9			
						6.8	0.8			
						6.5	0.9			
						6.5	0.8			
					Average	5.425	0.725			
					Standard Deviation	1.066962554	0.148477118			
1423		-19.1	78.7	20.2		4.4	0.5	X		
						4.2	0.4			

						3	0.4			
						3.3	0.5			
						3.5	0.4			
						1.5	0.4			
						1.4	0.5			
						2.2	0.5			
						3.4	0.6			
						4.3	0.4			
						4.7	0.5			
						3	0.6			
					Average	3.241666667	0.475			
					Standard Deviation	1.096654693	0.075377836			
1424		-16.4	75.9	13.2		5.5	0.8	X		
						6	0.8			
						5.3	0.9			
						4.3	1			
						5.4	0.9			
						4	0.9			
						6.3	0.8			
						5.3	1.1			
						7.1	1			
						7.3	1			
						6.3	0.9			
						5.2	0.8			
					Average	5.666666667	0.908333333			
					Standard Deviation	0.993920916	0.099620492			
1425		-11.2	76.4	6.5		5.4	0.7	X		
						4.2	0.7			
						5.3	0.6			
						5.6	0.5			
						4.7	0.5			
						5.2	0.6			
						5.2	0.6			
						5.3	0.7			

						3.8	0.6			
						4.2	0.7			
						5	0.7			
						5	0.6			
					Average	4.908333333	0.625			
					Standard Deviation	0.563202423	0.075377836			
1426	Von Behring	-7.8	71.5	35.3		6.6	0.7	X		
						5.7	0.6			
						5.3	0.9			
						6.2	0.8			
						6.6	0.9			
						6.1	1.1			
						5.8	0.9			
						6.2	0.9			
						6.9	1.1			
						6.1	0.8			
						6.7	0.8			
						5.7	1			
					Average	6.158333333	0.875			
					Standard Deviation	0.479504163	0.148477118			
1427		-1.3	77.0	31		7.7	1	X		
						6.2	1.1			
						8.4	0.8			
						7.87	1.3			
						6.5	1.3			
						7.4	1.1			
						7.8	1.2			
						6.5	1			
						7.1	1.2			
						7.6	1.2			
						9.1	1.2			
						8.1	1.3			
					Average	7.5225	1.141666667			
					Standard Deviation	0.845352267	0.150504203			

1428		-3.8	71.3	11.3		5.5	1.2	X		
						5.4	0.9			
						5.5	0.8			
						4.7	0.8			
						4.1	0.7			
						4.9	0.7			
						5.5	0.8			
						5.4	0.9			
						6.9	0.9			
						8.7	1			
						6.7	1			
						8.3	0.8			
				Average		5.966666667	0.875			
				Standard Deviation		1.409276625	0.142222617			
1429		-2.6	76.3	16.2		7.6	0.9	X		
						6.8	0.9			
						5.5	0.8			
						7.6	1			
						7	1			
						7.3	0.9			
						9.3	1.1			
						9.9	1.2			
						6.9	1.4			
						9.4	1.3			
						4.9	0.8			
						7	1			
				Average		7.433333333	1.025			
				Standard Deviation		1.499292763	0.191287504			
	Mare Smithii									
1430		-1.3	81.2	10.6		11	1.5	X		
						11.7	1.7			
						12.7	1.7			
						10	1.7			
						15	1.8			

						14.9	1.7			
						14.5	2.1			
						14.1	1.8			
						14.6	1.5			
						12.5	2.1			
						10.2	1.2			
						9.6	1.6			
					Average	12.56666667	1.7			
					Standard Deviation	2.04064755	0.248632624			
1431		-5.4	81.7	13.3		7.8	1.8		X	
						7	1.4			
						7.2	1.5			
						7.6	1.6			
						8.6	1.7			
						9.3	1.8			
						9.3	1.7			
						5.4	1.4			
						5.2	1.2			
						4.3	1.3			
						1.9	0.9			
						6.5	1.7			
					Average	6.675	1.5			
					Standard Deviation	2.179710156	0.273030135			
1432		-8.0	82.9	30.4		4.3	0.7		X	
						2.6	0.6			
						2.7	1			
						3.2	1			
						3	1.1			
						4.2	0.6			
						3.1	0.7			
						2.2	0.6			
						5.3	1			
						4	0.7			
						4.4	0.7			

						6.7	1.2			
					Average	3.808333333	0.825			
					Standard Deviation	1.285201317	0.217944947			
1433	Swassey	-5.5	89.4	22.1		7.3	1.2	X		
						7.2	1.4			
						8.5	2			
						9.1	1.7			
						6.3	1.5			
						7.5	1.6			
						6.9	1.3			
						6.7	1.3			
						7	1.3			
						5.8	1.4			
						5.4	1.4			
						3.1	1.2			
					Average	6.733333333	1.441666667			
					Standard Deviation	1.537017971	0.231431644			
1434		-9.8	86.4	7		3.5	0.7	X		
						3.3	0.6			
						3.4	0.7			
						3.5	0.7			
						3	0.6			
						2.8	0.6			
						3.5	0.7			
						2.2	0.7			
						2	0.7			
						3.9	0.5			
						3.7	0.6			
						2.9	0.6			
					Average	3.141666667	0.641666667			
					Standard Deviation	0.58380933	0.066855792			
1435		-13.1	85.6	13.2		4.8	0.4	X		
						4.1	0.4			

						3	0.4			
						1.6	0.4			
						3.3	0.4			
						3.7	0.5			
						4.8	0.5			
						3.2	0.6			
						4.6	0.7			
						4.4	0.5			
						2.9	0.3			
						2.5	0.3			
					Average	3.575	0.45			
					Standard Deviation	1.003742995	0.116774842			
1436		-12.0	81.0	10		4.8	0.5	X		
						4.2	0.6			
						4.4	0.5			
						4	0.6			
						3	0.5			
						5.2	0.5			
						4.8	0.6			
						5.9	0.5			
						4	0.6			
						2.7	0.4			
						3.8	0.5			
						4	0.5			
					Average	4.233333333	0.525			
					Standard Deviation	0.884547479	0.062158156			
1437		-17.2	89.6	12.9		3.5	0.5	X		
						3.5	0.4			
						2.6	0.5			
						2.3	0.6			
						2.7	0.4			
						2.3	0.5			
						3	0.5			
						2.6	0.5			

						3	0.4			
						3.9	0.5			
						4.2	0.5			
						4.8	0.5			
					Average	3.2	0.483333333			
					Standard Deviation	0.79200551	0.057735027			
1438		-16.3	81.1	24		4.5	0.7	X		
						3.3	0.7			
						4.6	0.6			
						3.2	0.6			
						3.7	0.5			
						4.3	0.9			
						3.4	0.6			
						5.6	0.8			
						3.3	0.6			
						3.5	0.7			
						4.7	0.6			
						4.4	0.5			
					Average	4.041666667	0.65			
					Standard Deviation	0.751311984	0.116774842			
1439		-19.1	86.6	13.5		4	0.7	X		
						3.3	0.6			
						3.4	0.7			
						4.3	0.4			
						5.2	0.5			
						5	0.6			
						4.2	0.6			
						4.1	0.5			
						3.2	0.6			
						4.1	0.7			
						4.7	0.7			
						4	0.6			
					Average	4.125	0.6			
					Standard Deviation	0.631196555	0.095346259			

1440		-20.8	83.6	22		4.9	0.7	X		
						4.8	0.6			
						4.4	0.7			
						4.4	0.6			
						4	0.8			
						3.4	0.8			
						3	0.7			
						2.4	0.6			
						3.6	0.6			
						4.9	0.7			
						4.2	1			
						4.6	1			
					Average	4.05	0.733333333			
					Standard Deviation	0.799431616	0.143548113			
1441		-26.1	80.4	14.5		0.9	0.3	X		
						2.3	0.4			
						0.3	0.4			
						1.9	0.4			
						1.1	0.5			
						0.6	0.4			
						0.4	0.4			
						1.5	0.4			
						0.3	0.5			
						4.6	0.6			
						1.1	0.5			
						1	0.4			
					Average	1.333333333	0.433333333			
					Standard Deviation	1.202522601	0.077849894			
1442		-29.5	85.2	10		3.6	0.4	X		
						4.7	0.5			
						2.9	0.4			
						2.7	0.4			
						1.5	0.3			

						1.3	0.3			
						3.1	0.3			
						3.1	0.5			
						4.4	0.7			
						4.6	0.7			
						3.3	0.5			
						4.2	0.4			
					Average	3.283333333	0.45			
					Standard Deviation	1.111782625	0.138169856			
1443		-22.5	80.6	11.6		4.2	0.5	X		
						3.6	0.5			
						1.3	0.5			
						3.4	0.5			
						2.3	0.5			
						1.7	0.5			
						3.4	0.4			
						2	0.5			
						2.4	0.5			
						3.6	0.4			
						2.9	0.5			
						3.3	0.5			
					Average	2.841666667	0.483333333			
					Standard Deviation	0.889799092	0.038924947			
1444		-23.7	87.7	10.1		2.7	0.5	X		
						3.1	0.5			
						3.8	0.6			
						1.7	0.4			
						3.2	0.4			
						3.1	0.4			
						2.1	0.4			
						4.3	0.5			
						2.7	0.5			
						3	0.7			
						5.3	0.7			

						2.4	0.6			
					Average	3.116666667	0.516666667			
					Standard Deviation	0.979641245	0.111464086			
1445		-30.8	83.4	22.1		5.1	0.6	X		
						6.9	0.5			
						5.7	0.5			
						3.1	0.4			
						2.3	0.8			
						4.7	0.2			
						2.4	0.5			
						4.1	0.4			
						3	0.3			
						7.4	0.6			
						2.2	0.7			
						7.1	0.7			
					Average	4.5	0.516666667			
					Standard Deviation	1.946558735	0.174945879			
1446		-35.8	83.5	14.5		4.3	0.6	X		
						4	0.7			
						4.7	0.7			
						2.9	0.8			
						1.7	0.7			
						3.1	0.7			
						3	0.6			
						2.9	0.5			
						4.5	0.7			
						4.3	0.8			
						4.3	0.6			
						3.2	0.7			
					Average	3.575	0.675			
					Standard Deviation	0.904659655	0.08660254			
1447		-39.6	84.6	34.7		8.4	1.1	X		
						9.7	1.2			

						6.9	1.1			
						5.2	1			
						5.6	0.9			
						4.5	0.6			
						3.3	0.6			
						4	0.7			
						4.5	0.8			
						8.8	1.3			
						9.2	1.4			
						6.1	0.6			
					Average	6.35	0.941666667			
					Standard Deviation	2.204746945	0.284312035			
1448		-36.1	88.7	8.7		14.4	2.4	X		
						14	1.9			
						13.2	1.5			
						13.6	2.4			
						13.5	2			
						13.7	2			
						13.1	2			
						14.1	2.3			
						14.2	2.2			
						14.5	2.2			
						15	2.4			
						13.5	2.4			
					Average	13.9	2.141666667			
					Standard Deviation	0.56729021	0.274551977			
1449		-37.3	88.9	7.3		10.2	1.2	X		
						7.1	1.5			
						8.1	1.3			
						10	1.2			
						7.5	0.7			
						9	1.1			
						5.9	0.9			
						9.1	1.4			

						10.9	1.5			
						9.2	1.6			
						10.9	1.5			
						8	1.1			
					Average	8.825	1.25			
					Standard Deviation	1.555707965	0.27136021			
1450		-46.1	85.2	29.3		10.3	1.4	X		
						10.2	1.2			
						6.2	0.6			
						7.8	0.9			
						6.3	0.8			
						3.1	0.8			
						6.5	0.9			
						6.8	0.8			
						7.7	1.4			
						10.4	1.7			
						11	1.3			
						12.1	1.4			
					Average	8.2	1.1			
					Standard Deviation	2.614296359	0.341121146			
1451		-44.9	81.2	5.8		6.8	1.1	X		
						6.73	1.2			
						6.7	1			
						5.9	0.8			
						7.3	1			
						6.2	0.7			
						5.1	0.6			
						4.2	0.4			
						3.3	0.4			
						4	0.5			
						6.4	0.6			
						6.2	1.4			
					Average	5.735833333	0.808333333			
					Standard Deviation	1.282947305	0.328794861			

1452		-47.7	85.4	14.1		9.9	1.3	X		
						11.4	1.5			
						6.7	0.9			
						3	0.7			
						3.9	0.7			
						4.4	0.7			
						1.6	0.6			
						2.4	0.7			
						2.7	0.7			
						4.5	0.5			
						9.8	1.1			
						8.3	1.2			
					Average	5.71666667	0.883333333			
					Standard Deviation	3.371763319	0.31574827			
1453		-48.1	89.7	7		5.8	0.7	X		
						6	0.8			
						1.1	0.2			
						0.7	0.1			
						1.2	0.2			
						1.9	0.3			
						0.2	0.3			
						7.3	0.8			
						6	0.6			
						6.4	0.8			
						0.3	0.3			
						0.2	0.3			
					Average	3.09166667	0.45			
					Standard Deviation	2.893710526	0.267989145			
1454		-42.8	88.3	7		8.1	1.1	X		
						8.6	1.2			
						7.2	1			
						6.5	1			
						4.8	0.8			

						6.6	0.8			
						6.6	0.8			
						6.8	1			
						9.4	1.4			
						9.6	1.4			
						8.2	1.3			
						7.7	1.5			
					Average	7.508333333	1.108333333			
					Standard Deviation	1.3687807	0.250302847			
1455		-47.8	80.9	7.5		5.9	0.7	X		
						7.2	0.6			
						7.3	0.8			
						5.3	0.6			
						4.4	0.5			
						3.2	0.3			
						2.7	0.5			
						2.2	0.3			
						2.5	0.3			
						3.1	0.6			
						6.8	0.9			
						6.7	0.6			
					Average	4.775	0.558333333			
					Standard Deviation	1.980415475	0.192865159			
1456		-52.1	83.6	13.2		10.1	1	X		
						12.2	0.9			
						13.4	1.5			
						11.3	1.5			
						10	1.8			
						11.5	1.6			
						9.4	1.1			
						10.3	1.1			
						11.2	0.9			
						10.2	0.7			
						9.5	0.9			

						11.6	1.1			
					Average	10.89166667	1.175			
					Standard Deviation	1.188932549	0.34145411			
1457		-52.9	83.3	14.1		8.6	0.6	X		
						4.6	0.7			
						7.7	0.6			
						7.9	1			
						3.8	0.5			
						5.5	0.7			
						5.8	0.5			
						3	0.7			
						6.3	0.9			
						9.8	1.2			
						6.8	0.8			
						5.7	1			
					Average	6.291666667	0.766666667			
					Standard Deviation	1.990640981	0.218812221			
1458		-56.4	83.0	15		9.3	0.5	X		
						7.3	0.6			
						6.7	0.6			
						6.1	0.6			
						4.2	0.5			
						4.9	0.8			
						2	0.2			
						2.1	0.4			
						3.7	0.4			
						5	0.5			
						6.6	0.8			
						7	0.6			
					Average	5.408333333	0.541666667			
					Standard Deviation	2.178180364	0.167648622			
1459		-58.2	86.8	10.6		11	1.5	X		
						7.9	1			

						6.8	0.8			
						0.7	0.3			
						1.7	0.5			
						3.8	0.5			
						2.7	0.4			
						8	0.7			
						11.2	1.4			
						1	0.4			
						4.8	0.5			
						3.9	0.5			
					Average	5.29166667	0.708333333			
					Standard Deviation	3.660963195	0.396480731			
1460		-56.4	89.9	17		9.8	0.8	X		
						7.9	0.7			
						6	0.6			
						2.5	0.6			
						1.5	0.5			
						1.4	0.3			
						0.8	0.3			
						3	0.3			
						6.8	0.7			
						6.4	0.7			
						10.3	0.7			
						7.5	0.5			
					Average	5.325	0.558333333			
					Standard Deviation	3.355084337	0.178164037			
1461		-64.0	81.1	24		4.2	0.2	X		
						11.3	1.3			
						8.8	1.2			
						8.4	1.6			
						3.2	0.6			
						2.6	0.6			
						3.2	0.5			
						5.7	0.5			

						10	1.4			
						8.2	1.4			
						12.4	3.6			
						11.3	2.2			
					Average	7.441666667	1.258333333			
					Standard Deviation	3.531792832	0.937558079			
1462		-62.5	88.2	19		14.8	2	X		
						9.8	1.2			
						8.3	1			
						7.8	0.6			
						1.6	0.2			
						2.5	0.3			
						10.4	1.1			
						12.8	1.5			
						10.2	1			
						10.2	1.1			
						10.4	1			
						11	0.9			
					Average	9.15	0.991666667			
					Standard Deviation	3.79221691	0.487028715			
1463		-68.0	83.7	22.5		10.2	1.1	X		
						2.8	0.3			
						7.7	1			
						4.6	0.6			
						1.5	0.2			
						1.5	0.5			
						3.7	0.4			
						4.6	0.4			
						1.4	0.2			
						2.5	0.5			
						7.9	0.7			
						7.5	0.6			
					Average	4.658333333	0.541666667			
					Standard Deviation	2.987080768	0.284312035			

1464		-60.9	82.7	8.3		12.4	2	X		
						10.9	1.6			
						10	0.9			
						6.6	0.7			
						3.2	0.3			
						1.5	0.2			
						1.9	0.3			
						1	0.2			
						1.6	0.3			
						11.5	1.5			
						12.4	1.8			
						11.1	1			
					Average	7.008333333	0.9			
					Standard Deviation	4.820497585	0.672850112			
1465		-65.1	85.4	6.7		5.1	0.5	X		
						9	1.1			
						6.1	0.5			
						5.6	0.6			
						1.8	0.4			
						1.7	0.2			
						1.7	0.2			
						3.6	0.4			
						4.2	0.4			
						5.6	1.2			
						4.2	0.3			
						0.9	0.2			
					Average	4.125	0.5			
					Standard Deviation	2.35145023	0.33028913			
1466		-68.7	95.4	20.4		10.6	1.3	X		
						11.5	1.8			
						11.5	1.5			
						6	0.4			
						4.7	0.4			

						8.7	0.7			
						5.9	0.4			
						3.7	0.3			
						3.6	0.4			
						4.3	0.4			
						5.4	0.5			
						4.5	0.3			
					Average	6.7	0.7			
					Standard Deviation	3.034947955	0.523970853			
1467		-66.8	94.6	8.7		13.4	4.1	X	XX	
						15.4	5			
						12.7	3.9			
						6.3	0.7			
						2.4	0.1			
						1.5	0.1			
						3.1	0.2			
						2.9	0.2			
						2.7	0.3			
						3.4	0.4			
						4.8	0.3			
						7.4	0.8			
					Average	6.333333333	1.341666667			
					Standard Deviation	4.852803001	1.833753395			
1468		-64.5	65.4	5.5		5.9	1		X	
						5.7	0.3			
						9.5	1.5			
						9	0.6			
						7.3	0.6			
						7.7	0.5			
						8.1	0.6			
						4.5	0.4			
						5.9	0.8			
						6.4	0.9			
						8	0.7			

						7.7	0.8			
					Average	7.141666667	0.725			
					Standard Deviation	1.477379949	0.316586912			
1469		-60.4	95.1	5		5.2	0.8	X		
						2.8	0.4			
						1	0.2			
						0.3	0.2			
						0	0.3			
						1.7	0.3			
						2.7	0.7			
						5.4	0.5			
						2.9	0.5			
						2.4	0.4			
						3.7	0.5			
						3.9	1.9			
					Average	2.666666667	0.558333333			
					Standard Deviation	1.733275057	0.460154783			
1470		-63.1	97.0	19.7		7	0.5	X		
						8.3	0.5			
						9	0.8			
						4	0.5			
						2.7	0.3			
						5	0.4			
						5	0.3			
						3.8	0.5			
						4.1	0.4			
						8.9	0.8			
						8.7	0.9			
						7.6	0.5			
					Average	6.175	0.533333333			
					Standard Deviation	2.306561786	0.196946386			
1471		-56.2	92.6	11		9.7	1.6	X		
						3.4	0.4			

						6.4	0.6			
						2.5	0.4			
						2.2	0.3			
						1.2	0.2			
						3.5	0.4			
						4.2	0.4			
						4.7	0.4			
						6.6	0.9			
						7.6	1			
						8.6	1.2			
					Average	5.05	0.65			
					Standard Deviation	2.703028604	0.42958754			
1472		-55.2	98.5	12.8		6	0.8	X		
						5.4	0.6			
						5.5	0.7			
						1.5	0.5			
						1.4	0.2			
						9.4	1.4			
						1.7	0.4			
						2	0.4			
						3	0.5			
						3.1	0.4			
						6.3	1.6			
						6.4	1.1			
					Average	4.308333333	0.716666667			
					Standard Deviation	2.547532972	0.434497271			
1473		-52.3	94.5	13		5	0.8	X		
						7.1	0.9			
						5.3	0.7			
						6.7	0.6			
						1.2	0.3			
						1.7	0.2			
						2.1	0.2			
						0.7	0.4			

						0	0.3			
						1.8	0.4			
						3	0.6			
						3.5	0.6			
					Average	3.175	0.5			
					Standard Deviation	2.357627853	0.233549683			
1474		-50.6	98.8	9.7		4.7	0.9	X		
						4.6	0.6			
						4.6	0.88			
						1.3	0.3			
						1.1	0.4			
						3.1	0.5			
						1.5	0.4			
						4.2	0.9			
						8.5	1			
						7.5	1			
						2.6	0.6			
						6.3	0.7			
					Average	4.166666667	0.681666667			
					Standard Deviation	2.401262294	0.250157526			
1475		-50.7	90.4	13.6		11.2	1.1	X		
						8.7	0.9			
						3.4	0.7			
						3	0.5			
						4	0.6			
						3.1	0.5			
						5	0.8			
						4.7	0.6			
						4.2	0.7			
						8.6	1.2			
						9	1.2			
						11.1	1.3			
					Average	6.333333333	0.841666667			
					Standard Deviation	3.145944961	0.29063671			

1476		-45.8	95.3	11.4		10.4	1.5		X	
						9.7	1.1			
						11	1.5			
						10	1.4			
						7.3	1			
						5.5	0.7			
						6.2	1.3			
						7.5	1.1			
						6	0.8			
						7.3	1			
						9.3	1.1			
						10.6	1.2			
					Average	8.4	1.141666667			
					Standard Deviation	1.974841766	0.253908836			
1477		-46.9	97.0	9.5		8.7	1.1		X	
						9.2	1			
						8.2	1.2			
						3.3	0.8			
						5	0.7			
						4	0.7			
						4.1	0.8			
						4.9	0.7			
						6.4	1.1			
						8.6	1.2			
						9.4	1.1			
						7.9	1.3			
					Average	6.641666667	0.975			
					Standard Deviation	2.268943821	0.222076973			
1478		-44.0	93.0	8.7		16	3.1		X	
						15.5	2.5			
						15.2	2.9			
						13.8	2.4			
						15.4	3.2			

						14.5	2.5			
						15.4	2.6			
						15.5	1.9			
						16	3.3			
						15.9	3.5			
						16.1	3			
						15.6	2.4			
					Average	15.40833333	2.775			
					Standard Deviation	0.669407246	0.465393284			
1479		-47.9	99.4	15		8.1	0.8	X		
						5.7	0.7			
						5.7	0.5			
						3.9	0.6			
						5.1	0.9			
						2	0.4			
						2.6	0.6			
						4.8	0.7			
						5.1	0.5			
						4.7	0.5			
						6.2	0.9			
						9.5	0.9			
					Average	5.283333333	0.666666667			
					Standard Deviation	2.076637725	0.177525073			
1480		-47.5	92.1	10.5		6.8	0.9	X		
						7	0.7			
						7.4	1			
						5.6	0.5			
						2.6	0.4			
						2.9	0.5			
						3	0.5			
						4.1	0.5			
						4.7	0.8			
						7.3	0.8			
						7.1	0.7			

						8.2	1			
					Average	5.558333333	0.691666667			
					Standard Deviation	2.014248488	0.210878394			
1481		-37.4	93.5	13.2		9.7	1.5	X		
						8.8	1.3			
						9.7	1.5			
						4.4	0.5			
						7.8	0.8			
						7.4	0.9			
						8.6	1			
						9.3	1.5			
						11.3	1.5			
						8.3	1.1			
						7.4	1.3			
						8.7	1.9			
					Average	8.45	1.233333333			
					Standard Deviation	1.68496021	0.386906926			
1482		-34.4	92.0	14.9		8.6	0.7	X		
						9.9	1.1			
						7	0.7			
						0.2	0.4			
						3.2	0.4			
						5.1	0.4			
						6.8	0.8			
						8.5	0.7			
						6.7	0.8			
						7.9	0.8			
						8.6	0.7			
						7.5	0.8			
					Average	6.666666667	0.691666667			
					Standard Deviation	2.695563133	0.206522433			
1483		-34.2	95.3	13.5		10.8	1.3	X		
						11.7	1			

						12.1	1.2			
						9.6	1.2			
						9.2	1.1			
						11.1	2			
						9.7	1			
						8.2	0.9			
						10.3	1.2			
						10.9	1.5			
						11	1			
						10.9	1.3			
					Average	10.45833333	1.225			
					Standard Deviation	1.106557589	0.295803989			
1484		-37.4	95.1	12		10	1.1		X	
						10.9	1.6			
						10.2	1.4			
						8.3	1.1			
						7.9	1.1			
						6.6	1			
						4.4	0.6			
						7.2	0.9			
						9.7	1.3			
						8.2	1.2			
						9.3	1.3			
						10.6	1.5			
					Average	8.608333333	1.175			
					Standard Deviation	1.903326434	0.273446023			
1485		-30.6	95.3	19.3		12.9	1.2		X	
						1	0.9			
						8.9	0.9			
						7.7	0.7			
						6.5	0.6			
						5.9	0.7			
						7.4	0.6			
						4.4	0.7			

						5	0.7			
						5.5	0.6			
						6.4	0.9			
						9.4	0.7			
					Average	6.75	0.76666667			
					Standard Deviation	2.93737669	0.177525073			
1486		-28.0	97.2	13		5	0.8	X		
						4.4	0.7			
						5.5	0.7			
						3.5	0.5			
						2.1	0.5			
						2.1	0.4			
						3.3	0.5			
						3.1	0.4			
						4	0.6			
						5.7	0.8			
						3.6	0.6			
						3.2	0.7			
					Average	3.79166667	0.6			
					Standard Deviation	1.181261524	0.141421356			
1487		-25.9	99.4	13.2		8	0.8	X		
						4.9	0.5			
						5.8	0.6			
						4.8	0.5			
						3.7	0.5			
						3.4	0.5			
						4.2	0.5			
						3.9	0.7			
						6.2	0.7			
						5.3	0.7			
						6.6	0.7			
						7.8	0.8			
					Average	5.38333333	0.625			
					Standard Deviation	1.536130518	0.121543109			

1488		-21.3	98.2	24.2		4.5	0.7	X		
						3.9	0.5			
						3.2	0.5			
						4.2	0.4			
						3.4	0.4			
						4.3	0.5			
						2.4	0.4			
						2.7	0.4			
						2.9	0.5			
						3.3	0.6			
						4.6	0.6			
						6.3	0.6			
					Average	3.808333333	0.508333333			
					Standard Deviation	1.068097998	0.099620492			
1489		-29.8	97.8	12.5		4.6	0.6	X		
						3.9	0.5			
						5.1	0.6			
						4.6	0.7			
						4.6	0.7			
						4.4	0.6			
						4.5	0.7			
						5.3	0.7			
						4.3	0.6			
						4.5	0.5			
						4.8	0.7			
						4.6	0.7			
					Average	4.6	0.633333333			
					Standard Deviation	0.359292234	0.077849894			
1490		-19.5	97.7	14.6		5.8	0.7	X		
						4.7	0.6			
						5.2	0.9			
						5.7	0.5			
						4.4	0.5			

						4.3	0.5			
						4.5	0.5			
						4.8	0.5			
						5.1	0.5			
						4.4	0.7			
						4.4	0.7			
						4.1	0.4			
					Average	4.783333333	0.583333333			
					Standard Deviation	0.554048461	0.140345893			
1491		-14.0	99.1	18.5		5	0.7	X		
						4.4	0.8			
						4.7	0.7			
						3.4	0.6			
						2.5	0.5			
						4.4	0.6			
						4.4	0.6			
						3	0.6			
						5.8	0.7			
						4.3	1			
						3.9	0.6			
						4.8	0.6			
					Average	4.216666667	0.666666667			
					Standard Deviation	0.904366512	0.130267789			
1492		-15.1	90.8	8.8		2.3	0.4	X		
						1.7	0.4			
						3.5	0.4			
						2.3	0.4			
						1.7	0.5			
						1.2	0.3			
						1.8	0.4			
						1.8	0.4			
						3.5	0.7			
						1.6	0.4			
						2.3	0.5			

						1.2	0.4			
					Average	2.075	0.433333333			
					Standard Deviation	0.762919035	0.098473193			
1493		-10.0	92.9	11.1		3.7	0.5	X		
						3.3	0.5			
						3.7	0.6			
						2.8	0.6			
						5.1	0.7			
						4.5	0.5			
						4.9	0.7			
						2.6	0.6			
						2.6	0.5			
						2.7	0.6			
						3.9	0.5			
						4.4	0.5			
					Average	3.683333333	0.566666667			
					Standard Deviation	0.902353824	0.077849894			
1494		-6.8	97.3	13		3	0.6	X		
						3.6	0.6			
						2.5	0.6			
						3.7	0.5			
						2.8	0.6			
						3.6	0.5			
						3.6	0.6			
						2.8	0.7			
						4.2	0.4			
						2.8	0.5			
						2.8	0.6			
						3.5	0.4			
					Average	3.241666667	0.55			
					Standard Deviation	0.519542339	0.090453403			
1495		-0.9	95.7	11.5		4.4	0.7	X		
						4.2	0.5			

						2.7	0.5			
						2.6	0.6			
						1.8	0.6			
						3.2	0.5			
						2.9	0.6			
						4.4	0.7			
						5.2	0.7			
						6.3	1			
						5	1			
						3.5	0.6			
					Average	3.85	0.666666667			
					Standard Deviation	1.293690985	0.172328087			
1496		-9.7	98.7	8.6		4.7	0.8	X		
						6.1	0.8			
						3.8	0.5			
						3.4	0.7			
						4.1	0.4			
						3.6	0.4			
						4.1	0.4			
						3.8	0.5			
						4.9	0.6			
						4.3	0.7			
						4.8	0.6			
						4	0.5			
					Average	4.3	0.575			
					Standard Deviation	0.737317003	0.148477118			
1497		-7.1	93.3	18.3		4	0.4	X		
						3.1	0.5			
						3	0.5			
						2.2	0.5			
						6.5	0.6			
						4.9	0.6			
						4.3	0.7			
						3.8	0.7			

						4.2	0.6			
						3.8	0.7			
						4.1	0.7			
						2.5	0.4			
					Average	3.86666667	0.575			
					Standard Deviation	1.142830086	0.113818037			
1498		-3.1	90.9	6.5		7.9	1.1		X	
						7.9	1.4			
						8.1	1.4			
						10.4	1.6			
						10.3	1.4			
						8.1	1.3			
						8.2	0.8			
						6.1	0.7			
						8.4	1.4			
						10.8	1.9			
						7.6	1.5			
						10.1	1.5			
					Average	8.658333333	1.333333333			
					Standard Deviation	1.41771797	0.331205329			
1499		-0.6	101.4	32		3.3	0.5		X	
						3	0.5			
						4.3	0.3			
						4.4	0.4			
						3	0.6			
						4.1	0.7			
						4.1	0.6			
						4.5	0.7			
						4.9	0.6			
						3.2	0.5			
						4.2	0.5			
						3.3	0.4			
					Average	3.858333333	0.525			
					Standard Deviation	0.657071095	0.121543109			

1500		-0.2	107.7	32		4	0.2	X		
						6.4	0.2			
						5.8	0.4			
						4.4	0.5			
						5	0.4			
						5.2	0.4			
						4.5	0.3			
						4	0.5			
						5.5	0.6			
						5	0.4			
						4.6	0.3			
						5.6	0.3			
				Average		5	0.375			
				Standard Deviation		0.739778837	0.121543109			
1501		-6.1	107.1	13		6.1	1	X		
						5.8	0.8			
						3.7	0.6			
						5.1	0.6			
						4.1	0.5			
						5.1	0.6			
						4.7	0.8			
						5.2	0.7			
						5.7	0.8			
						5.5	0.8			
						6	0.8			
						5.5	0.9			
				Average		5.208333333	0.741666667			
				Standard Deviation		0.736648841	0.144337567			
1502		-9.1	108.9	38.8		5	0.6	X		
						4.8	0.5			
						5.8	0.6			
						4.5	0.6			
						3.9	0.5			

						4.1	0.5			
						4.1	0.6			
						4	0.6			
						5.3	0.5			
						3.7	0.6			
						4.3	0.7			
						4.3	0.6			
					Average	4.483333333	0.575			
					Standard Deviation	0.62643774	0.062158156			
1503		-4.4	104.2	17.1		5.7	0.6	X		
						4.8	0.6			
						5.6	0.6			
						4	0.6			
						3.2	0.6			
						4.5	0.5			
						3.9	0.6			
						5	0.6			
						5	0.7			
						4.4	0.8			
						4.4	0.6			
						4.5	0.5			
					Average	4.583333333	0.608333333			
					Standard Deviation	0.705605263	0.079296146			
1504		-11.3	104.6	11.6		2.6	0.8	X		
						2.7	0.6			
						3.1	0.5			
						3.5	0.7			
						2.9	0.7			
						3	0.6			
						3	0.8			
						3.5	0.8			
						3.6	0.8			
						2.7	0.6			
						2.2	0.6			

					Average	3.2	0.6			
						3	0.675			
					Standard Deviation	0.415604707	0.105528971			
1505		-12.3	109.5	15.7		5.9	0.7	X		
						5.1	0.7			
						5.1	0.6			
						5	0.8			
						4.2	0.7			
						4.8	0.7			
						4.5	0.7			
						3.8	0.6			
						3.7	0.6			
						4.8	0.7			
						6	0.8			
						5.3	0.5			
					Average	4.85	0.675			
					Standard Deviation	0.722998805	0.08660254			
1506		-15.9	105.3	12.6		3.3	0.6	X		
						3.2	0.6			
						4.3	0.6			
						3.7	0.7			
						3.8	0.6			
						4	0.6			
						3.5	0.5			
						4.4	0.7			
						4.4	0.6			
						3.3	0.7			
						3.4	0.6			
						2.7	0.9			
					Average	3.666666667	0.641666667			
					Standard Deviation	0.533143906	0.099620492			
1507		-13.5	103.3	9.6		3.7	0.7	X		
						3.9	0.7			

						3.6	0.7			
						3.6	0.7			
						1.7	0.6			
						1.6	0.6			
						2.3	0.6			
						3.2	0.7			
						5.1	0.8			
						4.6	0.9			
						3.6	0.9			
						3.9	0.7			
					Average	3.4	0.71666667			
					Standard Deviation	1.062586895	0.10298573			
1508		-18.0	102.8	18.8		5.4	0.7	X		
						6.2	0.7			
						4.4	0.8			
						5.1	0.7			
						5	0.8			
						3.6	0.5			
						4.2	0.6			
						3.3	0.6			
						3.2	0.6			
						5	0.7			
						5.2	0.9			
						5.2	0.8			
					Average	4.65	0.7			
					Standard Deviation	0.919980237	0.112815215			
1509		-18.5	109.6	15.6		4.9	0.7	X		
						5.7	0.9			
						5.2	0.7			
						5.1	0.8			
						5.8	0.8			
						4	0.8			
						3.8	0.8			
						4.2	0.7			

						4.6	0.9			
						4.8	0.8			
						4.4	0.7			
						5.1	0.7			
					Average	4.8	0.775			
					Standard Deviation	0.629574171	0.075377836			
1510		-26.9	106.3	11		9.6	1.2	X		
						8.3	1			
						7.5	0.8			
						7.1	0.8			
						10.7	1.6			
						9.8	1.4			
						8.5	1.5			
						10.2	1.5			
						10.6	1.8			
						10.1	1.6			
						10	1.2			
						9.3	1.3			
					Average	9.308333333	1.308333333			
					Standard Deviation	1.192749561	0.320392751			
1511		-22.8	109.6	13.3		5.5	0.9	X		
						6.1	0.9			
						7.1	0.9			
						4.6	0.9			
						5.6	0.9			
						4.4	0.9			
						5.3	0.7			
						4.8	0.7			
						5.5	0.8			
						6.7	0.8			
						5.9	0.8			
						5.4	1			
					Average	5.575	0.85			
					Standard Deviation	0.799005063	0.090453403			

1512		-28.4	102.9	8.3		8.3	1.4		X	
						8.4	1.6			
						7.7	1.6			
						9.5	1.7			
						10.9	1.6			
						9	1.9			
						8.1	2			
						8.3	1.4			
						8.3	1.7			
						8.7	1.4			
						8.3	1.2			
						9.1	1.1			
					Average	8.716666667	1.55			
					Standard Deviation	0.842974531	0.264575131			
1513		-23.0	104.0	6.5		5.5	0.8		X	
						5.2	0.9			
						5	0.6			
						6	0.8			
						6.7	0.6			
						5.1	0.8			
						5.8	0.8			
						6.7	0.9			
						5.8	0.9			
						5.9	0.7			
						5.8	0.7			
						5.7	0.8			
					Average	5.766666667	0.775			
					Standard Deviation	0.543278488	0.105528971			
1514		-22.5	100.2	24.3		7.4	0.7		X	
						6.4	0.6			
						6	0.5			
						4.3	0.5			
						2.8	0.6			

						3.7	0.4			
						5	0.5			
						4.6	0.5			
						6.1	0.6			
						8.2	0.8			
						9	0.9			
						8.6	0.9			
					Average	6.008333333	0.625			
					Standard Deviation	2.002479524	0.16583124			
1515		-31.4	101.8	11.5		11.8	1.1	X		
						13	1			
						12.3	1.1			
INTERESTING "Butterfly" appearance in Fe						9.3	1			
						5.6	0.8			
						8	0.6			
						10.6	0.8			
						11.4	1.1			
						11.2	1.1			
						11	0.9			
						7.1	0.8			
						7.4	0.8			
					Average	9.891666667	0.925			
					Standard Deviation	2.358141924	0.16583124			
1516		-36.6	104.7	12.5		8.5	1	X		
						8.9	1.1			
						8.3	0.9			
						7.9	1.1			
						8.5	1.1			
						8.4	1.2			
						8.7	1			
						9.1	1.5			
						10.5	1.5			
						9.5	1.2			
						9.9	1.1			

					9.1	1.2			
				Average	8.941666667	1.158333333			
				Standard Deviation	0.735413716	0.183195541			
1517	-32.9	104.9	24.5		8.5	1	X		
					7	0.6			
					6.8	0.8			
					5.8	0.6			
					4.9	0.7			
					5.5	0.9			
					7.9	0.9			
					7.6	1			
					7.9	1.1			
					8.1	1.2			
					7.6	0.8			
					7.3	1.1			
				Average	7.075	0.891666667			
				Standard Deviation	1.126640218	0.197522534			
1518	-37.0	108.4	10.9		4.9	0.7	X		
					4.5	0.7			
					4.4	0.6			
					2	0.4			
					3.5	0.4			
					3.8	0.6			
					4.1	0.5			
					3.1	0.5			
					4	0.6			
					5	0.6			
					4.2	0.6			
					1.3	0.4			
				Average	3.733333333	0.55			
				Standard Deviation	1.120335448	0.108711461			
1519	-39.8	109.2	10.5		9.5	0.7	X		
					11.2	1.4			

						11.5	1.1			
						11	0.9			
						8	0.9			
						6.8	0.9			
						6.8	0.8			
						8.5	0.9			
						10.2	1.2			
						8.3	0.7			
						11.4	1.2			
						12.1	0.9			
					Average	9.608333333	0.966666667			
					Standard Deviation	1.886053279	0.214617348			
1520		-41.6	106.2	12.5		9	1	X		
						9.3	1.1			
						6.9	0.8			
						6	0.9			
						8.1	1.3			
						6.5	0.8			
						6.4	0.9			
						9.7	1.1			
						9.3	0.9			
						9.1	1.2			
						10.3	0.9			
						8.9	1.3			
					Average	8.291666667	1.016666667			
					Standard Deviation	1.464400798	0.180067327			
1521		-41.8	109.0	15.1		6.5	0.7	X		
						6.2	0.6			
						8	0.8			
						6.5	0.7			
						7.5	0.9			
						6.8	0.9			
						3.5	0.7			
						6.2	0.6			

						5.5	0.9			
						7.2	0.9			
						7	0.7			
						6.8	0.9			
					Average	6.475	0.775			
					Standard Deviation	1.141868485	0.121543109			
1522		-41.6	101.2	10.3		11.1	1.8	X		
						11.7	1.4			
						11.4	2			
						10.6	2			
						10.4	1.6			
						10.9	1.2			
						9.5	1.4			
						8.8	1.5			
						7.6	0.9			
						8.8	1			
						10.2	1.3			
						10.1	1.5			
					Average	10.09166667	1.466666667			
					Standard Deviation	1.214651715	0.349891758			
1523		-49.5	108.2	12.5		5.8	0.3	X		
						7.1	0.9			
						2.1	0.3			
						4	0.4			
						1.9	0.3			
						1.1	0.2			
						2	0.4			
						2.5	0.5			
						2	0.4			
						2.8	0.3			
						7.7	0.7			
						4.1	0.3			
					Average	3.591666667	0.416666667			
					Standard Deviation	2.188174139	0.199240984			

1524		-49.9	101.5	15.6		10.1	0.8	X		
						7.4	1.1			
						10.2	1			
						5.9	0.6			
						2.4	0.3			
						2.2	0.3			
						1.4	0.2			
						1.7	0.2			
						8.2	0.5			
						9.3	0.8			
						7	0.8			
						9.2	1			
					Average	6.25	0.633333333			
					Standard Deviation	3.433656943	0.328449064			
1525		-51.5	103.1	10.3		8.6	0.8	X		
						6.6	0.7			
						4.8	0.6			
						2.7	0.4			
						5.6	0.5			
						5	0.7			
						1.6	0.3			
						2.4	0.3			
						1.8	0.2			
						4.5	0.4			
						7.6	0.6			
						6.1	0.6			
					Average	4.775	0.508333333			
					Standard Deviation	2.283985751	0.188092498			
1526		-54.4	108.8	6.5		4.1	0.3	X		
						4.8	0.5			
						5.9	0.6			
						2.9	0.4			
						3.1	0.4			

						2.6	0.4			
						4	0.4			
						3	0.4			
						8.4	1.2			
						9	0.6			
						8.4	0.9			
						7.3	0.6			
					Average	5.291666667	0.558333333			
					Standard Deviation	2.408869344	0.257464325			
1527		-58.7	102.1	8		11.2	0.9	X		
						12.2	1.2			
						11.7	1			
						10.1	1.8			
						9	1.1			
						10	0.8			
						9.6	1			
						9.1	0.8			
						8.6	0.9			
						12.5	1.7			
						12.4	1.7			
						12.2	1.2			
					Average	10.71666667	1.175			
					Standard Deviation	1.470827432	0.362127552			
1528		-59.0	108.6	8.3		5.3	0.3	X		
						4.2	0.4			
						4.7	0.3			
						1.5	0.3			
						1.2	0.2			
						1.5	0.2			
						1.7	0.3			
						2.6	0.4			
						4.8	0.5			
						9.3	0.9			
						4.3	0.3			

					3	0.3			
				Average	3.675	0.366666667			
				Standard Deviation	2.303406568	0.187487373			
1529	-54.5	103.6	6.5		7.3	1.7	X		
					7.1	0.9			
					2.6	0.4			
					0.2	0.2			
					0	0.2			
					0.9	0.2			
					1	0.2			
					0.7	0.2			
					2.7	0.2			
					4.7	0.6			
					6.2	0.5			
					5.3	1			
				Average	3.225	0.525			
				Standard Deviation	2.761792896	0.467342584			
1530	-65.9	102.9	15		12.9	2.3	X		
					6.3	0.6			
					9.8	1			
					5	0.4			
					1.1	0.2			
					5.4	0.4			
					1.8	0.3			
					3.9	0.3			
					8.2	0.7			
					9.4	0.7			
					10.2	1.2			
					9.4	1.1			
				Average	6.95	0.766666667			
				Standard Deviation	3.622279543	0.585170268			
1531	-67.7	103.9	9.3		11.5	1.5	X		
					10.9	1.5			

						9.3	1.2			
						6.8	0.8			
						6.9	0.7			
						10.1	1.3			
						6.8	0.4			
						5.4	0.5			
						7.9	0.4			
						11	1.1			
						11.4	1.2			
						12.2	1.7			
					Average	9.183333333	1.025			
					Standard Deviation	2.316279671	0.453521574			
1532		-69.0	101.6	7.5		10.2	1		X	
						8.8	0.6			
						14.6	2.9			
						6.8	0.7			
						6.2	1			
						7.7	1.1			
						5.1	0.6			
						6	0.4			
						5.8	0.5			
						6.6	0.6			
						8.6	0.9			
						8.4	0.6			
					Average	7.9	0.908333333			
					Standard Deviation	2.583514168	0.665320611			
1533		-62.6	103.4	7.1		9.8	1.4		X	
						12.5	3.1			
						8.4	1.2			
						7.1	0.8			
						5.8	0.4			
						7.4	0.9			
						6.2	0.5			
						7.8	1.7			

						5.9	0.6			
						7.8	1			
						8.5	0.7			
						7.3	0.6			
					Average	7.875	1.075			
					Standard Deviation	1.857234014	0.74483067			
1534		-61.5	107.3	23.6		9.9	0.9	X		
						8	0.7			
						8.1	0.6			
						12.1	0.9			
						8.3	0.5			
						3.5	0.3			
						6.9	0.7			
						3.1	0.3			
						5.1	0.6			
						1.9	0.4			
						7.8	0.8			
						8	0.6			
					Average	6.891666667	0.608333333			
					Standard Deviation	2.968151654	0.206522433			
1535		-69.4	110.6	7.5		12.7	3.2	X		
						13	1.8			
						14.6	4.3			
						11.3	1.8			
						1.1	0.3			
						1.4	0.2			
						2.5	0.2			
						1.5	0.3			
						1.6	0.2			
						0.5	0.2			
						7.9	0.9			
						9.2	1.4			
					Average	6.441666667	1.233333333			
					Standard Deviation	5.516332499	1.350645188			

1536		-68.3	115.4	13.2		14	2.9	X		
						8.2	0.5			
						3.2	0.3			
						4.6	0.5			
						1.6	0.2			
						2.8	0.2			
						2.9	0.4			
						4.6	0.4			
						5.7	0.2			
						5.9	0.3			
						11.7	1.4			
						11.6	1.2			
				Average		6.4	0.708333333			
				Standard Deviation		4.065822068	0.792531426			
1537		-66.6	117.4	7		6.1	0.9	X		
						2.8	0.4			
						4.4	0.5			
						1.2	0.3			
						0.8	0.2			
						1.5	0.4			
						2.3	0.2			
						2.3	0.2			
						2.1	0.3			
						1.7	0.2			
						5.3	0.7			
						14.8	17.9			
				Average		3.775	1.85			
				Standard Deviation		3.84639737	5.059195049			
1538		-65.7	116.3	8.5		9.6	1.2	X		
						10.6	1.2			
						10.2	1.8			
						10.8	1.5			
						5.7	0.5			

						5.8	0.8			
						5.6	0.6			
						5.9	0.5			
						6.5	0.6			
						6.8	0.8			
						5.3	0.5			
						8.5	1.1			
					Average	7.608333333	0.925			
					Standard Deviation	2.167721189	0.433012702			
1539		-61.7	113.5	13.6		4.9	0.4	X		
						9.9	0.6			
						12	1.3			
						10.1	0.7			
						4.4	0.4			
						6	0.4			
						4.2	0.3			
						2.8	0.3			
						4.5	0.2			
						7.6	0.5			
						11.1	0.9			
						7.3	0.6			
					Average	7.066666667	0.55			
					Standard Deviation	3.076696379	0.306000594			
1540		-59.1	119.3	15.1		3.2	0.2	X		
						3.7	0.3			
						5.5	0.7			
						6.4	0.5			
						4.5	0.4			
						1.7	0.2			
						2.2	0.3			
						4	0.3			
						3.7	0.2			
						3.2	0.2			
						3	0.2			

						1.9	0.2			
					Average	3.583333333	0.308333333			
					Standard Deviation	1.400541021	0.156427929			
1541	Kimuta	-56.9	117.9	27.5		8.2	1	X		
						10.5	0.7			
						9.5	0.6			
						9.1	0.3			
						5.3	0.4			
						6.2	0.4			
						2.6	0.4			
						2.1	0.3			
						4.4	0.4			
						5.6	0.4			
						9.6	1			
						10.3	1.5			
					Average	6.95	0.616666667			
					Standard Deviation	2.97855975	0.371320331			
1542		-54.5	113.4	16.8		10.7	1.3	X		
						1.8	1			
						11.6	1.6			
						10.3	1			
						8.7	1			
						7.6	1			
						7.6	0.9			
						8.4	0.9			
						9.6	1			
						9	1.4			
						9.1	1.2			
						9	1.1			
					Average	8.616666667	1.116666667			
					Standard Deviation	2.452395242	0.216724934			
1543		-53.8	118.8	7.6		7.5	0.9	X		
						7.1	0.8			

						4.4	0.5			
						3.5	0.2			
						4.9	0.6			
						4.3	0.6			
						5.3	0.5			
						5.4	0.5			
						7.6	0.9			
						5.9	0.6			
						6.3	0.8			
						5.3	0.8			
					Average	5.625	0.641666667			
					Standard Deviation	1.303230252	0.206522433			
1544		-53.0	111.8	6		11.1	1.5	X		
						10	1.2			
						11.2	1.6			
						10.1	1.5			
						6.5	0.8			
						8.4	0.7			
						8.2	0.8			
						5.7	0.6			
						6.6	0.9			
						7.4	0.7			
						9.5	1.5			
						10.5	2			
					Average	8.766666667	1.15			
					Standard Deviation	1.901355179	0.458257569			
1545		-47.6	113.9	7.3		7.8	1.1	X		
						6.3	1			
						5.6	0.8			
						3.8	0.7			
						2.5	0.4			
						0.4	0.2			
						0.5	0.2			
						0.9	0.3			

						1	0.4			
						6.4	0.8			
						6.8	1.1			
						6.9	1			
					Average	4.075	0.66666667			
					Standard Deviation	2.865825282	0.349891758			
1546		-47.8	117.9	11.2		4.6	0.8	X		
						8.5	0.8			
						1.7	0.4			
						0.8	0.3			
						1	0.3			
						2.5	0.3			
						4.9	1.4			
						7.5	0.7			
						6.5	0.8			
						6.8	1.1			
						4.4	0.4			
						3.3	0.4			
					Average	4.375	0.641666667			
					Standard Deviation	2.584965271	0.355370059			
1547		-44.7	116.2	8		12.4	1.4	X		
						12.4	1.1			
						11.7	1			
						6.5	0.8			
						10.5	1.1			
						10.2	1			
						7.4	0.9			
						5.8	0.6			
						9.4	1.1			
						13.2	1.4			
						12.5	1.3			
						12.8	1.1			
					Average	10.4	1.066666667			
					Standard Deviation	2.595800805	0.234843597			

1548		-42.5	115.0	34		10.4	1	X		
						7.5	1.3			
						5.9	0.8			
						3.8	0.3			
						3.3	0.4			
						1.4	0.2			
						1.3	0.2			
						6.5	0.7			
						4.9	0.7			
						8.8	0.8			
						7.7	0.8			
						6	0.5			
					Average	5.625	0.641666667			
					Standard Deviation	2.820420665	0.334278962			
1549		-41.7	111.9	17		4.4	0.5	X		
						5.4	0.8			
						2.6	0.6			
						2.6	0.5			
						6.6	0.6			
						6.3	0.8			
						4.8	0.5			
						4	0.5			
						5.6	0.5			
						3.2	0.3			
						4.8	0.6			
						5.1	0.7			
					Average	4.616666667	0.575			
					Standard Deviation	1.321729812	0.142222617			
1550		-36.3	113.9	15.6		4.8	0.4	X		
						5.2	0.7			
						5.3	0.6			
						2.2	0.4			
						2.8	0.4			

						1.2	0.4			
						0.6	0.3			
						1.4	0.3			
						1.8	0.4			
						5.4	0.4			
						4.6	0.5			
						5.7	0.7			
					Average	3.416666667	0.458333333			
					Standard Deviation	1.920621743	0.137895437			
1551		-34.1	118.0	15		4.9	0.7	X		
						3.6	0.6			
						2.8	0.4			
						2.9	0.5			
						0.7	0.4			
						0.9	0.4			
						1.6	0.4			
						2.8	0.4			
						5.5	0.7			
						4.8	0.6			
						4.3	1			
						4	0.6			
					Average	3.233333333	0.558333333			
					Standard Deviation	1.573839159	0.183195541			
1552		-31.7	117.7	9.3		5.1	0.7	X		
						3.4	0.6			
						5	0.7			
						4.4	0.5			
						5.7	0.6			
						5.2	0.6			
						4.8	0.7			
						4	0.8			
						6.1	0.7			
						5.4	0.6			
						4.6	0.7			

					Average	4.1	0.6			
					Standard Deviation	4.816666667	0.65			
						0.764951969	0.079772404			
1553		-30.0	117.8	7		1.7	0.4	X		
						0.8	0.6			
						1.2	0.4			
						2	0.3			
						1.1	0.4			
						1	0.3			
						0.3	0.3			
						1.3	0.5			
						0.4	0.4			
						1.1	0.5			
						2	0.5			
						1.8	0.6			
					Average	1.225	0.433333333			
					Standard Deviation	0.569090183	0.107308674			
1554		-38.7	115.5	15.8		2.3	0.5	X		
						4	0.6			
						1.9	0.4			
						3.3	0.4			
						3.1	0.4			
						3	0.4			
						2.6	0.5			
						2.8	0.5			
						2.6	0.6			
						0.5	0.5			
						2	0.4			
						1.9	0.4			
					Average	2.5	0.466666667			
					Standard Deviation	0.885232378	0.077849894			
1555		-26.8	114.4	14.1		7	1.2	X		
						6.3	0.9			

						5.8	0.9			
						4	0.9			
						5.1	0.6			
						3.4	0.7			
						3.8	0.5			
						4.6	0.6			
						4.6	0.7			
						6.2	0.9			
						6.2	0.9			
						6.7	0.8			
					Average	5.308333333	0.8			
					Standard Deviation	1.216894956	0.190692518			
1556	Izak	-23.5	117.3	31.1		3.8	0.8	X		
						2.7	0.6			
						2.2	0.5			
						0.3	0.5			
						0.6	0.3			
						0.3	0.3			
						0.6	0.3			
						1	0.4			
						1	0.3			
						1	0.4			
						1.8	0.5			
						3.3	0.5			
					Average	1.55	0.45			
					Standard Deviation	1.197345549	0.150755672			
1557		-23.5	114.9	15.2		6.2	0.9	X		
						5.4	0.6			
						4.6	0.6			
						4.1	0.7			
						3.6	0.7			
						3.6	0.7			
						3.8	0.6			
						3.4	0.6			

						3.5	0.6			
						5.6	0.8			
						5.9	0.9			
						6.8	0.8			
					Average	4.708333333	0.708333333			
					Standard Deviation	1.210903745	0.116450015			
1558		-25.6	116.5	15.2		7.4	0.9	X		
						7.1	1.4			
						4.6	0.9			
						5.4	0.9			
						5.3	0.8			
						5.3	0.7			
						5.4	1			
						5.5	0.8			
						4.6	0.8			
						5.9	0.9			
						6.5	0.9			
						8.3	0.9			
					Average	5.941666667	0.908333333			
					Standard Deviation	1.150065874	0.172986249			
1559		-20.7	112.8	15.6		4.3	0.7	X		
						5.2	0.6			
						4.6	0.6			
						3.9	0.6			
						3.5	0.6			
						5.5	0.8			
						5.2	0.7			
						5.5	0.7			
						5.1	0.8			
						5.6	0.8			
						5.3	0.6			
						5.1	0.7			
					Average	4.9	0.683333333			
					Standard Deviation	0.67689129	0.083484711			

1560		-20.0	117.0	19.9		4.6	0.4	X		
						4.4	0.4			
						4.1	0.3			
						3.3	0.4			
						3.6	0.3			
						3.8	0.4			
						4.8	0.6			
						5.3	0.6			
						3.9	0.4			
						4.1	0.5			
						4.3	0.4			
						5	0.4			
					Average	4.26666667	0.425			
					Standard Deviation	0.588269161	0.09653073			
1561		-12.4	115.3	14.7		6.1	1	X		
						5.7	0.7			
						5.3	0.8			
						6.3	0.7			
						6.3	1.1			
						7.7	0.8			
						7.1	0.8			
						6.2	0.6			
						5.3	0.6			
						5.8	0.7			
						6.2	0.7			
						5.3	0.7			
					Average	6.108333333	0.766666667			
					Standard Deviation	0.727958957	0.149747262			
1562		-10.0	113.9	18.1		7.9	1	X		
						6.4	0.7			
						5.4	0.8			
						6.2	0.7			
						6.8	0.6			

						6	0.6			
						4.7	0.6			
						8.3	0.7			
						5.1	0.7			
						7.3	0.8			
						6.5	0.6			
						5.8	1			
					Average	6.366666667	0.733333333			
					Standard Deviation	1.085719982	0.143548113			
1563		-18.9	113.8	9.3		4.9	0.7	X		
						4.2	0.8			
						5.9	0.7			
						5.9	0.8			
						5.5	0.8			
						5.7	0.8			
						6.2	0.7			
						4	0.8			
						3.1	0.8			
						3.5	1			
						5.1	0.7			
						5.4	0.7			
					Average	4.95	0.775			
					Standard Deviation	1.020249524	0.08660254			
1564		-17.8	110.7	16.7		6.2	0.8	X		
						6.9	0.7			
						6.4	0.9			
						5.4	0.9			
						6.4	0.8			
						5.9	0.6			
						4.8	0.7			
						6	1			
						6.4	0.9			
						6.2	0.9			
						6	0.8			

						6.8	1			
					Average	6.116666667	0.833333333			
					Standard Deviation	0.576562436	0.123091491			
1565		-5.9	114.4	29.3		5.5	0.7	X		
						6.2	0.6			
						6.6	1			
						6.6	0.8			
						4.9	0.7			
						5.7	0.7			
						7.7	0.8			
						6.2	0.7			
						5	0.5			
						5.5	0.5			
						5.9	0.6			
						5.7	0.8			
					Average	5.958333333	0.7			
					Standard Deviation	0.772785203	0.141421356			
1566		-8.2	111.3	22.1		5.6	0.7	X		
						6.4	0.5			
						6.4	0.7			
						6	0.6			
						6.5	0.5			
						6.2	0.6			
						5.7	0.7			
						5.9	0.5			
						5.5	0.6			
						5.1	0.7			
						5.3	0.6			
						5.1	0.7			
					Average	5.808333333	0.616666667			
					Standard Deviation	0.503548018	0.083484711			
1567		-0.7	111.1	25.2		5.6	0.6	X		
						5.2	0.5			

						4.4	0.7			
						5.2	1			
						5.5	0.6			
						5.9	0.7			
						5.2	0.6			
						5.5	0.5			
						5.5	0.7			
						5.4	0.6			
						4.8	0.6			
						5.7	0.5			
					Average	5.325	0.633333333			
					Standard Deviation	0.407040315	0.137068883			
1568		-1.8	113.6	26.2		7	0.6	X		
						7.3	0.9			
						6.4	0.7			
						6.4	0.6			
						6	0.6			
						6	0.5			
						5.7	0.5			
						6.1	0.4			
						6.1	0.9			
						7.6	1			
						6.3	0.8			
						6.4	0.7			
					Average	6.441666667	0.683333333			
					Standard Deviation	0.57121614	0.185047087			
1569		-1.9	118.3	7.5		3.8	0.4	X		
						4.1	0.4			
						4.1	0.3			
						3.5	0.4			
						3.6	0.5			
						3.8	0.4			
						3.9	0.3			
						3.7	0.4			

						4.1	0.4			
						4.8	0.5			
						4.3	0.4			
						4.4	0.4			
					Average	4.008333333	0.4			
					Standard Deviation	0.370401093	0.060302269			
1570		-4.0	117.4	14.8		5.1	0.6	X		
						4.8	0.6			
						5	0.5			
						5.3	0.6			
						4.4	0.6			
						5.2	0.6			
						4.4	0.7			
						5.6	0.6			
						6.9	0.8			
						7.4	0.9			
						6	0.8			
						5.5	0.6			
					Average	5.466666667	0.658333333			
					Standard Deviation	0.917836719	0.116450015			
1571		-1.0	124.2	25.3		2.7	0.3	X		
						2.9	0.4			
						2.3	0.3			
						2.1	0.3			
						3	0.4			
						3.3	0.4			
						3.9	0.4			
						4	0.4			
						2	0.3			
						3.3	0.5			
						3.2	0.4			
						3.8	0.4			
					Average	3.041666667	0.375			
					Standard Deviation	0.677506569	0.062158156			

1572		-3.2	124.1	28.7		3.6	0.4	X		
						3.6	0.3			
						3.3	0.3			
						3	0.3			
						2.8	0.3			
						3	0.3			
						3.3	0.2			
						3	0.3			
						3.8	0.4			
						3.9	0.4			
						4.3	0.4			
						3.9	0.3			
				Average		3.458333333	0.325			
				Standard Deviation		0.464089203	0.062158156			
1573		-6.2	126.0	14		3.7	0.5	X		
						4.3	0.4			
						3	0.4			
						3.4	0.5			
						4.2	0.5			
						2.9	0.5			
						3	0.6			
						4.3	0.6			
						4.6	0.8			
						4.8	0.6			
						4.4	0.6			
						4.6	0.4			
				Average		3.933333333	0.533333333			
				Standard Deviation		0.697180469	0.115470054			
1574		-0.6	128.4	28.4		4.1	0.6	X		
						2.7	0.6			
						3.5	0.4			
						3.7	0.6			
						2.6	0.5			

						2.9	0.6			
						3.2	0.5			
						3.4	0.6			
						2.2	0.5			
						3.3	0.6			
						3.1	0.5			
						3.7	0.5			
					Average	3.2	0.541666667			
					Standard Deviation	0.53597829	0.066855792			
1575		-7.6	128.0	13.6		3.8	0.5	X		
						3.4	0.5			
						2.7	0.5			
						2.6	0.5			
						2.2	0.4			
						3.2	0.5			
						3.1	0.5			
						3.8	0.5			
						3.7	0.5			
						2.9	0.4			
						3.5	0.5			
						3.6	0.5			
					Average	3.208333333	0.483333333			
					Standard Deviation	0.519542339	0.038924947			
1576		-13.9	124.8	16.3		4.7	0.5	X		
						5.1	0.5			
						4.6	0.6			
						5	0.5			
						4	0.6			
						4.6	0.7			
						3.3	0.6			
						5.6	0.5			
						5.4	0.5			
						4.6	0.6			
						5.2	0.5			

						5.1	0.5			
					Average	4.766666667	0.55			
					Standard Deviation	0.631496539	0.067419986			
1577	D. Arsonval	-10.4	124.4	29.5		3.9	0.4	X		
						3.2	0.6			
						5.3	0.5			
						5.1	0.5			
						3.7	0.5			
						3.6	0.5			
						3.4	0.6			
						3.2	0.5			
						3.6	0.5			
						3.3	0.4			
						3.3	0.5			
						4.1	0.1			
					Average	3.808333333	0.466666667			
					Standard Deviation	0.707695792	0.130267789			
1578		-15.8	120.3	10.5		4	0.5	X		
						3.2	0.7			
						2.8	0.5			
						3.4	0.5			
						4.1	0.5			
						3.4	0.6			
						3.6	0.5			
						3.9	0.6			
						4.3	0.7			
						4.6	0.7			
						3.6	0.5			
						3.4	0.5			
					Average	3.691666667	0.566666667			
					Standard Deviation	0.505350164	0.088762536			
1579		-16.1	126.6	13		4.2	0.7	X		
						3.6	0.6			

						4.1	0.7			
						3.8	0.3			
						4	0.4			
						3.8	0.6			
						4.1	0.5			
						4.3	0.5			
						5	0.6			
						3.8	0.6			
						4.2	0.5			
						3.9	0.7			
					Average	4.06666667	0.558333333			
					Standard Deviation	0.360134655	0.124011241			
1580	Lutke	-16.9	122.8	35.7		4.7	0.6	X		
						3.8	0.5			
						3.1	0.5			
						2.9	0.6			
						2.5	0.6			
						3.1	0.6			
						2.1	0.5			
						2.9	0.6			
						3.7	0.7			
						4.3	0.7			
						4.5	0.6			
						3.4	0.5			
					Average	3.41666667	0.583333333			
					Standard Deviation	0.805473698	0.071774056			
1581	Babakin	-21.0	123.0	20.8		4	0.5	X		
						4.5	0.6			
						3.1	0.6			
						2.9	0.5			
						3.2	0.5			
						3	0.4			
						4.5	0.8			
						3.9	0.3			

						3.5	0.6			
						3.7	0.5			
						4.1	0.5			
						3.8	0.6			
					Average	3.683333333	0.533333333			
					Standard Deviation	0.552405209	0.123091491			
1582		-23.4	123.1	15.1		4.7	0.6	X		
						5.1	0.7			
						3	0.5			
						2.3	0.4			
						2.8	0.3			
						1.9	0.6			
						3.3	0.5			
						2.2	0.6			
						3	0.5			
						4.8	0.6			
						1.7	0.6			
						4.3	0.5			
					Average	3.258333333	0.533333333			
					Standard Deviation	1.190460822	0.107308674			
1583		-28.2	122.6	10.5		5.7	1	X		
						4.9	0.9			
						5.6	0.8			
						6.5	0.8			
						4.3	0.8			
						3.2	0.7			
						2.8	0.5			
						3.9	0.7			
						4.9	0.9			
						5.5	0.9			
						5.1	0.8			
						4.4	1			
					Average	4.733333333	0.816666667			
					Standard Deviation	1.07308674	0.140345893			

1584		-29.9	125.6	10.1		5.9	0.8	X		
						4.2	0.7			
						5.6	0.9			
						5.4	0.7			
						3.4	0.6			
						3.8	0.7			
						3.4	0.6			
						4.8	0.9			
						5.1	0.7			
						5.4	0.7			
						5.9	0.8			
						4.9	0.7			
					Average	4.81666667	0.73333333			
					Standard Deviation	0.912372864	0.098473193			
1585		-28.7	123.9	38.8		5.8	1	X		
						4.1	0.5			
						2.5	0.6			
						5.7	0.9			
						3.8	0.8			
						3.9	0.6			
						5.7	1			
						4.7	0.7			
						4.8	0.8			
						5.7	0.6			
						6.3	0.7			
						5.6	0.8			
					Average	4.88333333	0.75			
					Standard Deviation	1.121551955	0.162368828			
1586		-30.2	121.5	17.5		5.1	0.6	X		
						4.7	0.6			
						5	0.5			
						4.5	0.6			
						4.7	0.5			

						3.9	0.4			
						4.6	0.5			
						3.5	0.4			
						2.8	0.4			
						3.9	0.4			
						4.5	0.5			
						6.2	0.4			
					Average	4.45	0.483333333			
					Standard Deviation	0.861816264	0.083484711			
1587		-33.4	121.4	10.1		6.5	0.8	X		
						6.3	0.5			
						5.1	0.6			
						3.9	0.6			
						3.6	0.5			
						2.8	0.4			
						2.9	0.5			
						4.6	0.6			
						3.3	0.6			
						3.8	0.6			
						5.6	0.7			
						3.4	0.5			
					Average	4.316666667	0.575			
					Standard Deviation	1.285466547	0.105528971			
1588		-35.6	120.6	9.5		7.5	0.9	X		
						7.3	0.6			
						4.8	0.5			
						2.3	0.4			
						1.7	0.5			
						7	1.1			
						10.2	1.1			
						7.9	0.9			
						5.8	0.6			
						6.6	0.8			
						7.6	0.9			

						8.4	1.5			
					Average	6.425	0.816666667			
					Standard Deviation	2.45620735	0.318614425			
1589		-32.8	129.7	12.9		7.4	0.9			
						4.5	0.7			
						4.6	0.6			
						7.1	0.7			
						5	0.6			
						7.2	0.8			
						6.1	1			
						4.4	0.9			
						6.4	0.8			
						5.3	0.8			
						6.9	0.8			
						5	0.9			
					Average	5.825	0.791666667			
					Standard Deviation	1.147427954	0.124011241			
1590		-38.5	128.1	9.5		3.7	0.6	X		
						7.1	0.8			
						5.8	0.6			
						4.2	0.8			
						6	0.8			
						3.2	0.6			
						4.4	0.5			
						1.9	0.5			
						2.7	0.6			
						1.7	0.4			
						4.8	0.8			
						1.9	0.4			
					Average	3.95	0.616666667			
					Standard Deviation	1.763003635	0.152752523			
1591		-39.8	123.0	9.8		6.6	0.8	X		
						5.9	0.7			

						4.4	0.5			
						4.2	0.6			
						4.1	0.6			
						4.1	0.7			
						3.1	0.5			
						2.5	0.7			
						4.6	0.4			
						6.6	0.6			
						6.3	0.8			
						6.2	0.8			
					Average	4.883333333	0.641666667			
					Standard Deviation	1.399242219	0.131137217			
1592		-41.8	126.8	8.5		4.5	0.6	X		
						6.7	0.7			
						5.5	0.6			
						5.3	0.6			
						4.6	0.7			
						4.2	0.8			
						4.8	0.6			
						6	0.7			
						5.7	0.5			
						4.8	0.6			
						5.1	0.5			
						4.3	0.6			
					Average	5.125	0.625			
					Standard Deviation	0.748483315	0.08660254			
1593		-49.4	126.0	8.2		2.4	0.4	X		
						2.3	0.4			
						1.1	0.3			
						3.8	0.5			
						1.5	0.4			
						1.6	0.3			
						0.1	0.4			
						0.1	0.2			

						1.3	0.3			
						2.2	0.2			
						1.6	0.3			
						2.6	0.4			
					Average	1.716666667	0.341666667			
					Standard Deviation	1.045191008	0.090033664			
1594		-48.5	128.0	20.2		2.7	0.4	X		
						4.2	0.6			
						4.5	0.5			
						4	0.3			
						2.7	0.3			
						3.9	0.5			
						1.7	0.3			
						3	0.3			
						1.7	0.3			
						1.3	0.3			
						0.1	0.3			
						2.4	0.2			
					Average	2.683333333	0.358333333			
					Standard Deviation	1.332006916	0.116450015			
1595	Pickelner	-48.5	123.8	44.1		4.4	0.4	X		
						6.8	0.4			
						3.5	0.5			
						1.5	0.5			
						3.7	0.5			
						2.3	0.3			
						0.5	0.2			
						2.1	0.4			
						2.2	0.3			
						4.9	0.4			
						8.5	0.8			
						3.6	0.4			
					Average	3.666666667	0.425			
					Standard Deviation	2.265686062	0.148477118			

1596		-45.2	122.3	7.1		1.3	0.3	X		
						2.5	0.3			
						2.2	0.3			
						2.7	0.6			
						4.4	0.3			
						1.9	0.4			
						2.9	0.6			
						3.4	0.5			
						2.3	0.4			
						4.2	0.4			
						2.1	0.4			
						0.7	0.3			
					Average	2.55	0.4			
					Standard Deviation	1.079141073	0.112815215			
1597		-50.2	124.9	11		10.3	1.3	X		
						11.7	1.2			
						7.7	0.9			
						6.4	0.6			
						8.1	0.8			
						7.9	1.1			
						2.9	0.5			
						3.7	0.4			
						4.3	0.5			
						8.6	0.9			
						9.5	1			
						11.4	1.2			
					Average	7.708333333	0.866666667			
					Standard Deviation	2.907500749	0.308466392			
1598		-53.5	121.4	10		6.9	0.6	X		
						4.2	0.5			
						4.5	0.4			
						4.9	0.8			
						2.1	0.2			

						4.9	0.6			
						5.1	0.5			
						7.8	0.5			
						3.9	0.6			
						5.5	0.5			
						4.2	0.5			
						9.5	0.8			
					Average	5.291666667	0.541666667			
					Standard Deviation	1.95655464	0.162135372			
1599		-56.4	127.1	14.5		7.6	0.7	X		
						7.9	0.7			
						9.3	1.1			
						6.2	0.5			
						5.9	0.8			
						4.8	0.5			
						2.7	0.3			
						2.2	0.4			
						1.1	0.2			
						3.2	0.5			
						3.2	0.4			
						4.9	0.5			
					Average	4.916666667	0.55			
					Standard Deviation	2.535146879	0.243086217			
1600		-58.8	122.3	14.8		4.7	0.4	X		
						6.8	0.6			
						6.5	0.4			
						0.4	0.2			
						2.8	0.2			
						1.7	0.2			
						2.3	0.4			
						3.6	0.3			
						4.3	0.5			
						4.1	0.3			
						5.4	0.4			

						2.4	0.3			
					Average	3.75	0.35			
					Standard Deviation	1.935082803	0.124316312			
1601		-58.2	127.8	17		6	0.4	X		
						3.8	0.5			
						3	0.4			
						3.2	0.4			
						1.5	0.2			
						3	0.4			
						1.5	0.3			
						5.9	0.7			
						5.7	0.4			
						2.2	0.5			
						2.6	0.3			
						6.1	0.6			
					Average	3.708333333	0.425			
					Standard Deviation	1.765043565	0.135680105			
1602		-62.8	129.9	11.9		6.3	0.4	X		
						8	0.8			
						5.4	0.3			
						8.8	0.8			
						4.1	0.5			
						4.8	0.3			
						2.5	0.3			
						5.4	0.4			
						5.4	0.5			
						2.7	0.3			
						6	0.4			
						7.1	0.5			
					Average	5.541666667	0.458333333			
					Standard Deviation	1.90428146	0.178164037			
1603		-64.2	124.7	19		9.9	1.3	X		
						10.4	1.5			

						10.1	1			
						10.9	1.7			
						7.7	0.7			
						5.4	0.7			
						8.9	1.3			
						8.1	0.4			
						6.1	0.5			
						10.1	1.4			
						8.1	1.1			
						5.9	0.5			
					Average	8.46666667	1.00833333			
					Standard Deviation	1.899441704	0.439955232			
1604		-65.1	124.8	9.4		10.6	1.9	X		
						14.5	5.4			
						9.3	1.1			
						2.4	0.2			
						2.6	0.2			
						2.7	0.2			
						4.6	0.4			
						4.1	0.4			
						10.8	1			
						11.4	1.7			
						8	0.8			
						6.5	0.5			
					Average	7.29166667	1.15			
					Standard Deviation	4.064359132	1.456334127			
1605		-66.3	127.7	38.5		3.4	0.2	X		
						8.7	0.7			
						12	1.7			
						2.2	0.2			
						2.4	0.3			
						0.8	0.1			
						2.2	0.2			
						3.3	0.2			

						6.5	0.6			
						7.2	0.5			
						10.3	1.2			
						6.4	0.5			
					Average	5.45	0.533333333			
					Standard Deviation	3.60466869	0.479267117			
1606		-69.5	127.1	10.5		11.3	2.1	X		
						6.3	0.5			
						17.2	6.8			
						2.4	0.2			
						6.3	0.4			
						4.6	0.4			
						2.3	0.2			
						2.8	0.2			
						8.6	0.7			
						7.1	0.4			
						14.1	3.1			
						13.5	2.3			
					Average	8.041666667	1.441666667			
					Standard Deviation	4.976025857	1.952833993			
1607		-68.9	133.7	11.5		5.8	0.1	X		
						2.6	0.3			
						10.3	0.6			
						6.9	0.7			
						9	0.7			
						5.8	0.2			
						5.5	0.2			
						6.1	0.5			
						2.6	0.4			
						5.8	0.6			
						1.9	0.1			
						8.4	0.5			
					Average	5.891666667	0.408333333			
					Standard Deviation	2.597711697	0.223437334			

1608		-61.6	134.1	9.5		4.5	0.4	X		
						2.8	0.4			
						2.6	0.4			
						1	0.3			
						2.3	0.3			
						2.4	0.5			
						1	0.3			
						1.1	0.2			
						3.9	0.5			
						5.5	0.5			
						4	0.2			
						4	0.4			
					Average	2.925	0.366666667			
					Standard Deviation	1.474094483	0.107308674			
1609		-62.3	136.1	9		3.9	0.4	X		
						7.3	0.8			
						2.6	0.4			
						0.5	0.2			
						3.1	0.4			
						0.7	0.2			
						1.1	0.2			
						2	0.2			
						4.2	0.4			
						2.7	0.3			
						3.1	0.5			
						4	0.2			
					Average	2.933333333	0.35			
					Standard Deviation	1.861247545	0.178376517			
1610		-63.0	138.2	8		4.1	0.5	X		
						6	0.8			
						3.9	0.5			
						5.7	0.8			
						4.2	0.8			

						4.7	0.4			
						1.5	0.2			
						4.9	0.7			
						7.1	0.9			
						4.3	0.6			
						2.4	0.3			
						2.1	0.4			
					Average	4.241666667	0.575			
					Standard Deviation	1.642314516	0.226133508			
1611		-65.2	134.2	5.4		12.6	2.5	X		
						13.9	2.8			
						7.1	0.9			
						5.1	0.5			
						2.9	0.2			
						2.9	0.3			
						3.7	0.4			
						4.2	0.4			
						7.4	1			
						6.7	0.5			
						11.4	1.7			
						14.2	3			
					Average	7.675	1.183333333			
					Standard Deviation	4.273836897	1.04170606			
1612		-54.4	137.0	20.1		1.8	0.3	X		
						3.6	0.3			
						3.7	0.4			
						4	0.4			
						2.6	0.4			
						4.5	0.4			
						3.5	0.4			
						2.2	0.4			
						4.2	0.5			
						3.1	0.4			
						4.7	0.5			

						3.2	0.4			
					Average	3.425	0.4			
					Standard Deviation	0.894554231	0.060302269			
1613		-53.9	133.1	19		10.3	1	X		
						12	1.4			
						10.4	1.1			
						6.6	0.7			
						4.9	0.5			
						3.1	0.4			
						4.6	0.4			
						5.5	0.4			
						5.6	0.5			
						13.1	2			
						7.2	0.8			
						8.8	1			
					Average	7.675	0.85			
					Standard Deviation	3.194064097	0.487106485			
1614		-58.1	134.6	9		6.4	0.5	X		
						5.9	0.4			
						4.9	0.7			
						4.3	0.4			
						2.1	0.4			
						3.1	0.5			
						3.7	0.4			
						3.4	0.4			
						8.8	0.9			
						5.4	0.5			
						6.3	0.4			
						5.9	0.6			
					Average	5.016666667	0.508333333			
					Standard Deviation	1.824994811	0.156427929			
1615		-55.6	130.8	16.2		7	1.1	X		
						9.2	1			

						6.5	0.9			
						1.6	0.2			
						2.2	0.2			
						0.4	0.3			
						1.5	0.2			
						0.1	0.2			
						3.6	0.3			
						4.1	0.2			
						4.3	0.4			
						5.6	0.5			
					Average	3.841666667	0.458333333			
					Standard Deviation	2.832107578	0.34234043			
1616		-52.3	137.0	8.9		5.8	0.7	X		
						5.7	0.5			
						4.4	0.8			
						5.5	0.3			
						5.4	0.5			
						7.7	0.6			
						10.4	0.8			
						7.1	0.6			
						5.6	0.8			
						3.5	0.5			
						5.5	0.5			
						5.3	0.6			
					Average	5.991666667	0.6			
					Standard Deviation	1.755748135	0.153741223			
1617		-47.3	138.9	8.7		10.9	0.8	X		
						6.8	0.7			
						6.1	0.6			
						5.7	0.3			
						7.9	0.6			
						5.3	0.5			
						4.2	0.6			
						4.9	0.5			

						5.2	0.4			
						7.2	0.8			
						8.8	0.8			
						9.2	6			
					Average	6.85	1.05			
					Standard Deviation	2.01787467	1.566989006			
1618		-46.1	136.2	10.4		6.2	0.8	X		
						7.3	0.4			
						2.5	0.2			
						3.8	0.5			
						4.6	0.4			
						2.7	0.4			
						3.2	0.2			
						2.1	0.3			
						4.2	0.5			
						4.9	0.5			
						5	0.6			
						6.5	0.7			
					Average	4.416666667	0.458333333			
					Standard Deviation	1.66068624	0.183195541			
1619		-47.7	132.6	12.6		9.8	0.9	X		
						6.1	0.8			
						7.4	0.8			
						6.7	0.6			
						6.2	0.5			
						6.2	0.6			
						6.1	0.6			
						6.4	0.7			
						8	0.6			
						11.4	1.2			
						10.2	0.9			
						9.5	0.9			
					Average	7.833333333	0.758333333			
					Standard Deviation	1.903744317	0.197522534			

1620		-41.6	133.5	11.4		5	0.6	X		
						3.9	0.6			
						6.4	0.5			
						4.1	0.3			
						4.1	0.4			
						6.9	0.7			
						6	0.6			
						6.5	0.2			
						2.5	0.4			
						5.2	0.5			
						6.4	0.7			
						7.1	0.8			
					Average	5.341666667	0.525			
					Standard Deviation	1.443139465	0.17645499			
1621		-40.6	136.5	6.7		9.9	0.7	X		
						9.3	1.2			
						5.2	0.5			
						4.9	0.5			
						3.8	0.4			
						3.7	0.4			
						9.6	1.3			
						9.5	1.3			
						11.2	1.2			
						10.9	1			
						8.5	0.7			
						10.3	1			
					Average	8.066666667	0.85			
					Standard Deviation	2.82564018	0.355476633			
1622		-39.3	136.1	9.5		6.5	0.7	X		
						7.1	0.7			
						7	0.7			
						7.2	0.6			
						7.2	0.7			

						5.9	0.6			
						7.3	0.6			
						8.4	0.7			
						8.9	1.1			
						7.5	0.8			
						8.4	0.9			
						7.6	0.8			
					Average	7.41666667	0.74166667			
					Standard Deviation	0.836478912	0.144337567			
1623		-35.9	131.0	13.7		8.4	1	X		
						5.6	0.9			
						4.4	0.7			
						2.6	0.7			
						3.3	0.7			
						4.1	0.6			
						3	0.6			
						5.4	0.7			
						8.7	1			
						6.8	0.9			
						6	0.7			
						8.9	1.4			
					Average	5.6	0.825			
					Standard Deviation	2.230368905	0.230118547			
1624		-32.2	138.3	18		8.1	0.7	X		
						5.5	0.3			
						7.1	0.4			
						5.1	0.7			
						4.2	0.4			
						4.1	0.6			
						6.6	0.8			
						3.9	0.5			
						6	0.8			
						5.4	0.6			
						8.8	1			

					8	1			
				Average	6.066666667	0.65			
				Standard Deviation	1.663694319	0.227636073			
1625	-37.6	131.5	11.4		2.7	0.5	X		
					3.8	0.7			
					4.8	0.7			
					5.8	0.7			
					5.4	0.6			
					4.6	0.6			
					3.7	0.6			
					4.3	0.6			
					4.6	0.8			
					5.9	0.7			
					4.8	0.6			
					2.8	0.8			
				Average	4.433333333	0.658333333			
				Standard Deviation	1.040396195	0.090033664			
1626	-39.0	138.2	8.8		7.7	0.6	X		
					8.2	0.7			
					7.2	0.8			
					7.1	0.8			
					7.6	0.7			
					8.1	0.5			
					8.2	0.8			
					8.9	0.8			
					8.3	0.7			
					9	0.8			
					7.7	0.7			
					8.7	0.9			
				Average	8.058333333	0.733333333			
				Standard Deviation	0.620056205	0.107308674			
1627	-29.8	131.8	11.8		6	0.8	X		
					4.3	0.5			

					4.6	0.9		
					1.5	0.6		
					2.5	0.5		
					4	0.7		
					2.5	0.7		
					4.6	0.5		
					5	0.6		
					4.9	0.7		
					6	0.6		
					4.8	0.5		
				Average	4.225	0.633333333		
				Standard Deviation	1.39487699	0.130267789		
1628		-28.9	137.6	8.4	4.4	0.6	X	
					2.8	0.6		
					2.6	0.6		
					3.2	0.6		
					2.6	0.5		
					3.6	0.4		
					3.6	0.5		
					5.3	0.9		
					4.5	0.7		
					3.5	0.4		
					4	0.6		
					3.4	0.7		
				Average	3.625	0.591666667		
				Standard Deviation	0.817006732	0.137895437		
1629		-27.7	135.4	12	4.5	0.6	X	
					3.1	0.6		
					3.5	0.7		
					2.9	0.4		
					3.9	0.7		
					4.2	1		
					4.7	0.8		
					3.6	0.7		

						2.7	0.7			
						2.8	0.7			
						4.2	0.7			
						0.4	0.5			
					Average	3.375	0.675			
					Standard Deviation	1.154536507	0.148477118			
1630		-25.9	132.6	8.5		2.9	0.6	X		
						2.7	0.7			
						3.4	0.5			
						3.6	0.6			
						3.8	0.4			
						4.3	0.7			
						2.6	0.4			
						0.7	0.3			
						1.2	0.4			
						4.6	0.5			
						2.9	0.4			
						3.3	0.5			
					Average	3	0.5			
					Standard Deviation	1.140175425	0.12792043			
1631		-23.5	138.9	7.3		3.1	0.7	X		
						3	0.6			
						3	0.5			
						3.6	0.6			
						3	0.5			
						3.4	0.5			
						2.8	0.6			
						3.3	0.4			
						3.2	0.5			
						3.8	0.6			
						2.9	0.7			
						3.3	0.7			
					Average	3.2	0.575			
					Standard Deviation	0.295419578	0.09653073			

1632		-14.7	136.0	11.1		3.6	0.5	X		
						4.7	0.5			
						4	0.6			
						4.6	0.5			
						3.4	0.5			
						4.5	0.4			
						2.9	0.5			
						3.4	0.3			
						3.5	0.7			
						3.8	0.4			
						2.9	0.5			
						2.8	0.5			
					Average	3.675	0.491666667			
					Standard Deviation	0.66486499	0.099620492			
1633		-13.6	133.8	9.2		3.4	0.5	X		
						2.6	0.6			
						2.2	0.5			
						2.3	0.5			
						2.3	0.5			
						3.1	0.5			
						2.7	0.5			
						3.7	0.5			
						3.1	0.5			
						3.3	0.6			
						3.4	0.7			
						2.8	0.4			
					Average	2.908333333	0.525			
					Standard Deviation	0.49810246	0.075377836			
1634		-13.4	137.5	10.4		3.9	0.5	X		
						5.1	0.6			
						3.6	0.5			
						4.1	0.5			
						3.7	0.6			

						5.4	0.7			
						4.8	0.6			
						4.1	0.6			
						4.1	0.8			
						4.4	0.7			
						3.8	0.6			
						3.4	0.6			
					Average	4.2	0.608333333			
					Standard Deviation	0.6164414	0.090033664			
1635		-11.2	135.2	10.9		3.5	0.6	X		
						3.7	0.5			
						3.9	0.5			
						3	0.5			
						3.7	0.6			
						3.5	0.5			
						4.2	0.5			
						1.6	0.7			
						3.9	0.6			
						3.1	0.5			
						3.9	0.6			
						4.1	0.6			
					Average	3.508333333	0.558333333			
					Standard Deviation	0.702538687	0.066855792			
1636		-10.9	139.7	13.6		4	1.2	X		
						3.6	0.6			
						3.7	0.6			
						3.6	0.6			
						3.3	0.6			
						3.7	0.6			
						3.5	0.5			
						3.8	0.5			
						2.9	0.6			
						3.7	0.6			
						3.8	0.7			

						4.1	0.6			
					Average	3.641666667	0.641666667			
					Standard Deviation	0.314666731	0.183195541			
1637		-16.9	139.4	12		3.1	0.7	X		
						2.6	0.8			
						3.1	0.6			
						3	0.6			
						2.9	0.6			
						3.1	0.6			
						4.2	0.6			
						4	0.7			
						3.8	0.9			
						3.2	0.8			
						3.1	0.6			
						4.3	0.6			
					Average	3.366666667	0.675			
					Standard Deviation	0.556504241	0.105528971			
1638		-8.1	136.3	17.6		2.8	0.5	X		
						2.7	0.4			
						3.1	0.4			
						2.7	0.4			
						2.4	0.4			
						3.6	0.5			
						2.4	0.4			
						3.2	0.4			
						3.1	0.4			
						3.1	0.3			
						2.7	0.4			
						4.4	0.5			
					Average	3.016666667	0.416666667			
					Standard Deviation	0.557320429	0.057735027			
1639		-4.3	138.3	22.9		3.1	0.6	X		
						3.8	0.7			

						2	0.6			
						2.9	0.5			
						3.1	0.5			
						2.4	0.5			
						3.1	0.5			
						3.1	0.4			
						2.8	0.4			
						1.6	0.4			
						4	0.4			
						4.3	0.5			
					Average	3.016666667	0.5			
					Standard Deviation	0.782575391	0.095346259			
1640		-1.8	139.7	10.7		3.4	0.5	X		
						3	0.5			
						2.4	0.6			
						2.3	0.5			
						2.7	0.4			
						3.2	0.5			
						3.5	0.6			
						3.9	0.7			
						3.4	0.5			
						3.8	0.6			
						3.4	0.5			
						4.3	0.5			
					Average	3.275	0.533333333			
					Standard Deviation	0.598672774	0.077849894			
1641		-4.7	133.9	9		2.4	0.6	X		
						2.8	0.5			
						2.5	0.6			
						3.2	0.6			
						3	0.5			
						4.2	0.6			
						3	0.5			
						2.9	0.5			

						2.6	0.6			
						3.2	0.5			
						2.9	0.6			
						3.3	0.6			
					Average	3	0.558333333			
					Standard Deviation	0.470975776	0.051492865			
1642		-6.5	136.7	13.6		3.7	0.5	X		
						3.9	0.6			
						3.3	0.5			
						3.3	0.4			
						3.4	0.4			
						3.1	0.7			
						3	0.5			
						3.2	0.7			
						2.7	0.5			
						14.7	0.5			
						3.3	0.6			
						2.8	0.6			
					Average	4.2	0.541666667			
					Standard Deviation	3.323743782	0.099620492			
1643		-4.7	144.7	12		3.8	0.3	X		
						2.5	0.4			
						3	0.4			
						2.3	0.4			
						3	0.4			
						2.1	0.4			
						2.7	0.5			
						2.7	0.4			
						2.1	0.5			
						2.5	0.6			
						3.4	0.4			
						2.3	0.4			
					Average	2.7	0.425			
					Standard Deviation	0.522232968	0.075377836			

1644		-7.8	147.7	14.8		1.5	0.6	X		
						1.4	0.4			
						1.5	0.4			
						2.2	0.4			
						2.5	0.4			
						1.7	0.5			
						1.7	0.4			
						0.3	0.6			
						1.5	0.6			
						2.1	0.5			
						2.6	0.5			
						2.5	0.5			
					Average	1.79166667	0.48333333			
					Standard Deviation	0.644498866	0.083484711			
1645		-8.1	144.8	12.5		2.9	0.5	X		
						2.3	0.4			
						2.7	0.6			
						1.5	0.5			
						2.4	0.5			
						2.8	0.4			
						1.9	0.5			
						2.5	0.5			
						2.9	0.5			
						2.9	0.4			
						3.3	0.6			
						2.5	0.6			
					Average	2.55	0.5			
					Standard Deviation	0.488969231	0.073854895			
1646		-8.5	142.4	9.3		3.8	0.6	X		
						2.9	0.6			
						2.7	0.5			
						2.8	0.5			
						2.1	0.6			

						2.6	0.6			
						3.1	0.6			
						3.2	0.6			
						2.8	0.5			
						3.5	0.6			
						3.4	0.6			
						3.2	0.7			
					Average	3.008333333	0.583333333			
					Standard Deviation	0.456186432	0.057735027			
1647		-1.1	147.5	13.3		2.1	0.5	X		
						2.5	0.5			
						2.4	0.4			
						2.8	0.4			
						1.4	0.5			
						2.3	0.4			
						2.1	0.4			
						2.8	0.4			
						1.8	0.6			
						2.8	0.5			
						1.7	0.5			
						0.7	0.4			
					Average	2.116666667	0.458333333			
					Standard Deviation	0.636515133	0.066855792			
1648		-14.3	145.3	16.3		4.4	0.7	X		
						3	0.3			
						3.8	0.5			
						3.8	0.6			
						2.9	0.6			
						2.9	0.7			
						3.3	0.7			
						2.8	0.8			
						4.7	0.8			
						4.8	0.7			
						0.2	0.7			

						2.8	0.7			
					Average	3.283333333	0.65			
					Standard Deviation	1.222392091	0.138169856			
1649		-12.7	142.4	14		2.8	0.7	X		
						3	0.7			
						5.3	0.6			
						3.4	0.6			
						2.4	0.7			
						4.4	1			
						4.7	0.7			
						4	0.7			
						4	0.5			
						4	0.6			
						3.5	0.6			
						2.9	0.8			
					Average	3.7	0.683333333			
					Standard Deviation	0.857056273	0.126730446			
1650		-11.7	145.2	10.7		6.2	0.6	X		
						4	0.8			
						4.2	0.8			
						5.3	0.8			
						4.7	0.8			
						4.2	0.7			
						3.3	0.7			
						3.7	0.7			
						3.4	0.6			
						3.6	0.7			
						5	0.7			
						4.2	0.6			
					Average	4.316666667	0.708333333			
					Standard Deviation	0.854754971	0.079296146			
1651		-18.6	149.2	16		2	0.5	X		
						3.8	0.6			

						3.8	0.7			
						3.4	0.5			
						3.5	0.5			
						2.9	0.4			
						2.4	0.5			
						3.4	0.6			
						4.1	0.4			
						3.3	0.6			
						3.8	0.6			
						3.6	0.5			
					Average	3.333333333	0.533333333			
					Standard Deviation	0.616932785	0.088762536			
1652		-18.9	143.2	22		4.6	0.5	X		
						3.6	0.6			
						3.8	0.8			
						5.7	0.8			
						4.5	0.6			
						2.3	0.5			
						3.2	0.7			
						3.9	0.9			
						4.1	0.7			
						3.5	0.8			
						4.3	0.5			
						3.9	0.7			
					Average	3.95	0.675			
					Standard Deviation	0.829567248	0.135680105			
1653		-20.7	143.6	18		4.7	0.7	X		
						4	0.7			
						5	0.8			
						5.4	0.7			
						3.4	0.8			
						3.9	0.6			
						3.8	0.7			
						4	0.7			

						3.8	0.9			
						4	0.6			
						4	0.7			
						4.9	0.8			
					Average	4.241666667	0.725			
					Standard Deviation	0.603713257	0.08660254			
1654	Andronov	-22.9	145.8	16.8		3	0.6	X		
						4.3	0.6			
						3.3	0.7			
						3.1	0.4			
						1.6	0.6			
						2.9	0.6			
						2.6	0.5			
						5	0.7			
						3	0.9			
						3.3	0.6			
						4	0.3			
						3.2	0.6			
					Average	3.275	0.591666667			
					Standard Deviation	0.860364616	0.150504203			
1655		-25.2	149.0	10.8		4.6	0.7	X		
						4.3	0.7			
						5.1	0.7			
						4.7	0.4			
						2.4	0.6			
						2.7	0.5			
						3.1	0.6			
						3.6	0.7			
						4.4	0.5			
						4.3	0.7			
						3.9	0.7			
						6.1	0.5			
					Average	4.1	0.608333333			
					Standard Deviation	1.040978561	0.108362467			

1656		-27.3	141.1	9.8		4.5	0.8	X		
						2	0.8			
						2.3	0.6			
						3	0.6			
						3	0.6			
						2.1	0.5			
						0.3	0.5			
						3	0.7			
						3.1	0.7			
						3.8	0.9			
						3.5	0.7			
						3.7	0.7			
					Average	2.858333333	0.675			
					Standard Deviation	1.086661554	0.121543109			
1657		-28.3	142.7	11.1		5	0.7	X		
						4	0.6			
						4.1	0.9			
						3	0.5			
						2.9	0.5			
						2.5	0.6			
						2.2	0.5			
						2.1	0.4			
						2.8	0.4			
						3.3	0.5			
						4.2	0.5			
						5	0.8			
					Average	3.425	0.575			
					Standard Deviation	1.014553193	0.154478595			
1658		-30.8	145.3	13.3		6.3	0.5	X		
						5.7	0.5			
						6.6	0.5			
						7.8	0.6			
						7.4	0.7			

						4.6	0.2			
						8.6	0.3			
						7.3	0.4			
						8.2	0.4			
						8	0.4			
						6	0.6			
						7.3	0.6			
					Average	6.983333333	0.475			
					Standard Deviation	1.170728859	0.142222617			
1659		-32.8	146.8	19.7		11.2	1.5	X		
						9.8	1.4			
						9.4	0.9			
						8.2	0.9			
						7.6	1			
						8	1.4			
						7.6	1.4			
						7.7	1			
						8.1	1.4			
						9.1	1.1			
						8.3	1			
						11.3	1.3			
					Average	8.858333333	1.191666667			
					Standard Deviation	1.322847022	0.227469612			
1660		-34.5	147.5	10.2		7.8	1.3	X		
						7.8	0.8			
						8.2	0.9			
						6.7	0.9			
						6.2	0.9			
						6	0.8			
						6.1	0.7			
						6.4	0.7			
						6.5	0.9			
						6.7	1.2			
						5.6	1.5			

						8.7	1.6			
					Average	6.891666667	1.016666667			
					Standard Deviation	0.984847319	0.30698929			
1661		-39.0	146.7	11.5		6.7	0.8	X		
						8.4	0.9			
						7	0.9			
						5.5	0.6			
						4.4	0.7			
						4.5	0.5			
						5.5	0.4			
						2.6	0.4			
						7.7	0.5			
						7.6	0.6			
						4.3	0.6			
						6.8	0.6			
					Average	5.916666667	0.625			
					Standard Deviation	1.732488139	0.171225529			
1662		-37.0	144.9	8.2		1.6	0.5	X		
						2.2	0.5			
						2.2	0.4			
						2.9	0.3			
						4.2	0.3			
						3.2	0.3			
						2.9	0.5			
						3.6	0.3			
						3.9	0.4			
						3	0.4			
						3.7	0.7			
						3.3	0.9			
					Average	3.058333333	0.458333333			
					Standard Deviation	0.765694377	0.183195541			
1663		-41.9	141.1	9.8		8.1	1	X		
						6.7	0.7			

						6.8	0.8			
						6.3	0.6			
						7.8	0.9			
						8.5	0.9			
						7.7	0.8			
						7.3	0.8			
						7.2	0.9			
						7.6	0.9			
						7.2	0.8			
						7.7	0.8			
					Average	7.408333333	0.825			
					Standard Deviation	0.620056205	0.105528971			
1664		-44.1	142.9	15.7		8.2	1.3	X		
						10.2	1.2			
						7.1	0.9			
						2	0.1			
						0.1	0.1			
						2.2	0.2			
						1.3	0.2			
						1.1	0.2			
						1.1	0.3			
						0.7	0.2			
						0.4	0.2			
						5.5	0.8			
					Average	3.325	0.475			
					Standard Deviation	3.475662134	0.445431354			
1665		-43.6	145.3	12		2.2	0.4	X		
						2.9	0.4			
						4.1	0.5			
						6.1	0.9			
						2.9	0.4			
						2	0.5			
						4.5	0.4			
						3.5	0.9			

						3.3	0.4			
						2.9	0.3			
						2.1	0.3			
						2.6	0.3			
					Average	3.258333333	0.475			
					Standard Deviation	1.17740727	0.209436473			
1666		-47.1	143.7	10		10.2	1.2	X		
						10.6	1.1			
						10.8	1			
						7	0.8			
						7.7	0.8			
						7.9	0.7			
						3.8	0.6			
						7.8	0.8			
						12.4	1.6			
						9.4	1.3			
						6.3	0.7			
						8.3	0.7			
					Average	8.516666667	0.941666667			
					Standard Deviation	2.322159392	0.302890119			
1667		-40.2	147.4	11.9		4.8	0.9	X		
						5.8	1.1			
						5.5	0.5			
						6.1	0.7			
						3.2	0.6			
						3.5	0.4			
						4.3	0.7			
						5.2	0.5			
						4.1	0.5			
						4.5	0.5			
						3.9	0.5			
						6.6	0.5			
					Average	4.791666667	0.616666667			
					Standard Deviation	1.064688032	0.203752672			

1668		-52.4	146.6	9.3		9.9	0.7	X		
						9.5	0.9			
						9.4	0.8			
						6	0.4			
						7.2	0.5			
						8	0.5			
						6	0.5			
						7.8	0.5			
						7.5	0.6			
						8.2	0.5			
						8.3	0.7			
						4.8	0.4			
					Average	7.71666667	0.58333333			
					Standard Deviation	1.54203722	0.15859229			
1669		-54.7	147.2	11.5		8.4	0.8	X		
						8.9	0.8			
						7.8	0.6			
						5.9	0.4			
						6.1	0.7			
						5	0.5			
						5.2	0.4			
						7.2	0.5			
						9.6	0.7			
						9.3	0.6			
						8.2	0.6			
						8.4	0.6			
					Average	7.5	0.6			
					Standard Deviation	1.59430805	0.13483997			
1670		-50.5	145.7	6.7		4.4	0.3	X		
						6.3	0.3			
						7.4	0.8			
						6.3	0.5			
						8.4	0.8			

						7.8	0.5			
						10.7	1.4			
						8.4	0.9			
						6.3	0.5			
						5.2	0.5			
						6	0.3			
						9.7	1			
					Average	7.241666667	0.65			
					Standard Deviation	1.845613144	0.337099931			
1671		-57.2	146.4	11.2		7.2	0.5	X		
						4.3	0.9			
						2.2	0.3			
						1.1	0.2			
						2.1	0.3			
						3.1	0.4			
						3.2	0.2			
						1.4	0.3			
						2.1	0.4			
						3.7	0.5			
						6.9	0.6			
						3.2	0.1			
					Average	3.375	0.391666667			
					Standard Deviation	1.95081568	0.21514618			
1672		-58.1	141.3	17		5.3	0.7	X		
						7.9	0.6			
						6	0.5			
						4.9	0.3			
						3.7	0.5			
						6	0.5			
						1.2	0.3			
						0.1	0.3			
						1.9	0.2			
						7.1	0.6			
						6.5	0.7			

						3.2	0.1			
					Average	4.483333333	0.441666667			
					Standard Deviation	2.467178489	0.197522534			
1673		-62.6	144.7	22.5		16.4	5.5	X		
						12.1	1.5			
						14.4	2.1			
						15.5	3			
						2.7	0.3			
						6.1	0.4			
						5	0.6			
						4.9	0.4			
						4.2	0.3			
						5.1	0.3			
						3.4	0.2			
						10.5	1.4			
					Average	8.358333333	1.333333333			
					Standard Deviation	5.077662013	1.581905257			
1674		-66.6	146.5	12		9.5	1	X		
						8.1	0.7			
						9.8	0.9			
						9.6	1.1			
						7.5	0.3			
						6.5	0.6			
						6.9	0.5			
						6.6	0.5			
						6.3	0.5			
						7.4	0.4			
						10.3	1.1			
						11.6	2.3			
					Average	8.341666667	0.825			
					Standard Deviation	1.753675793	0.539570536			
1675		-63.8	145.2	8.5		5.3	0.4	X		
						6.6	0.5			

						9.6	1.1			
						9.6	0.8			
						9	1.1			
						7	0.6			
						5.7	0.4			
						4.3	0.3			
						10	1.4			
						8.5	0.9			
						8.2	0.4			
						7.3	0.6			
					Average	7.591666667	0.708333333			
					Standard Deviation	1.861796949	0.350216383			
1676		-68.2	140.9	25		7.8	0.5	X		
						6.9	0.2			
						11.5	0.7			
						11.1	1.1			
						7.7	0.7			
						3.8	0.1			
						1.1	0.1			
						3.7	0.2			
						2.7	0.2			
						1.4	0.1			
						0.8	0.1			
						8	1			
					Average	5.541666667	0.416666667			
					Standard Deviation	3.78884927	0.371320331			
1677		-60.7	148.7	18.6		7	0.3	X		
						15.2	2.8			
						10.3	1.3			
						10.9	1.4			
						0.6	0.5			
						2.9	0.3			
						0.1	0.2			
						4.5	0.3			

						5.5	0.4			
						9.5	0.8			
						10.5	1.2			
						9.2	0.7			
					Average	7.183333333	0.85			
					Standard Deviation	4.574203027	0.74528823			
1678		-67.3	157.9	14		16.2	4.6		X	
						11.8	2.4			
						12.8	1.9			
						12.5	1.1			
						7.2	0.2			
						5.5	0.2			
						5.6	0.1			
						8	0.5			
						9.3	0.5			
						11.7	0.6			
						13.7	1.6			
						10.4	1.2			
					Average	10.39166667	1.241666667			
					Standard Deviation	3.338605679	1.285908475			
1679		-63.1	158.7	10		9.3	0.3		X	
						10.1	0.8			
						9.9	0.8			
						6.9	0.2			
						6.1	0.2			
						6.4	0.5			
						7.6	0.3			
						11.3	0.7			
						8.9	0.3			
						11.1	0.6			
						11.6	0.8			
						9.6	0.5			
					Average	9.066666667	0.5			
					Standard Deviation	1.917068469	0.23741027			

1680		-62.7	154.0	9		11.1	1.3		X	
						11.9	1.3			
						11.9	0.9			
						12.3	1.5			
						8.5	0.5			
						8.4	0.8			
						8.8	0.8			
						7.6	0.6			
						5.4	0.2			
						10	0.7			
						10	0.6			
						4.6	0.2			
					Average	9.208333333	0.783333333			
					Standard Deviation	2.495981619	0.415239982			
1681		-65.3	155.2	5		7.4	0.3		X	
						6.1	0.3			
						4.8	0.4			
						1.5	0.1			
						2.7	0.1			
						3	0.2			
						1.9	0.1			
						2.1	0.1			
						2.1	0.1			
						2	0.1			
						5.9	0.3			
						8.2	0.5			
					Average	3.975	0.216666667			
					Standard Deviation	2.382178148	0.140345893			
1682		-68.5	157.0	10.1		12.5	0.9		X	
						11.4	0.6			
						12.9	1.9			
						7.6	0.5			
						4.6	0.1			

						8	0.4			
						7.9	0.2			
						6.2	0.3			
						8.2	0.8			
						10.6	1.5			
						11.5	0.2			
						12.4	1.2			
					Average	9.483333333	0.716666667			
					Standard Deviation	2.743532339	0.567023061			
1683		-57.3	156.6	5.8		11.4	0.8		X	
						11.5	0.8			
						9.7	0.5			
						7.9	0.5			
						8.6	0.5			
						7.8	0.4			
						8	0.5			
						8.2	0.5			
						8.3	0.5			
						10.7	0.6			
						11	0.8			
						9.6	0.5			
					Average	9.391666667	0.575			
					Standard Deviation	1.441248407	0.142222617			
1684		-54.3	154.5	8		13.6	1.7		X	
						12.2	0.8			
						11.7	0.9			
						10.2	0.6			
						8.8	0.5			
						10.2	0.9			
						11.5	0.7			
						13	1.3			
						10.6	1			
						12.1	0.7			
						10.7	0.8			

					11.3	0.9			
				Average	11.325	0.9			
				Standard Deviation	1.326050184	0.324737656			
1685	-53.3	156.1	12.6		11.9	1.2	X		
					9.2	1.1			
					11.3	0.5			
					10.1	0.6			
					10.2	0.6			
					10	0.9			
					10.8	0.6			
					10.3	0.9			
					10.3	0.8			
					11.5	0.8			
					11.4	0.9			
					11.3	0.9			
				Average	10.69166667	0.816666667			
				Standard Deviation	0.795965204	0.212488859			
1686	-50.0	151.2	15		14.4	1.1	X		
					12.6	1.1			
					12.7	1.1			
					11.3	1.5			
					9.3	0.7			
					11.1	0.9			
					11.8	0.8			
					12.8	1.1			
					10	0.7			
					9.7	0.4			
					11.7	0.8			
					13.9	1.4			
				Average	11.775	0.966666667			
				Standard Deviation	1.602909287	0.311399578			
1687	-58.5	151.8	6.1		9.2	0.5	X		
					7	0.4			

						6.5	0.3			
						8.1	0.4			
						7.9	0.4			
						8.7	0.5			
						8.8	0.4			
						8.7	0.3			
						7.6	0.3			
						8	0.3			
						8.9	0.4			
						9	0.6			
					Average	8.2	0.4			
					Standard Deviation	0.843154251	0.095346259			
1688		-46.7	151.9	14.5		10.2	0.8	X		
						10.1	0.8			
						10.3	0.8			
						9.6	0.9			
						8.7	0.7			
						9.2	0.9			
						8.9	0.9			
						7.8	0.6			
						9	0.6			
						9.7	0.9			
						10.1	0.9			
						9.4	1			
					Average	9.416666667	0.816666667			
					Standard Deviation	0.742028342	0.126730446			
1689		-42.2	150.0	15		4.4	0.5	X		
						6.4	0.6			
						7.2	0.6			
						5.5	0.6			
						4	0.4			
						5.1	0.6			
						4.4	0.6			
						4.3	0.5			

						3	0.3			
						2.1	0.5			
						6.7	0.7			
						4.6	0.6			
					Average	4.808333333	0.541666667			
					Standard Deviation	1.485969737	0.108362467			
1690		-40.4	152.2	11.2		6	0.7	X		
						7.3	0.5			
						7	0.8			
						6.3	0.5			
						3.4	0.5			
						4.2	0.4			
						5.2	0.5			
						5.6	0.5			
						5.7	0.5			
						6.3	0.5			
						5.5	0.6			
						5.5	0.5			
					Average	5.666666667	0.541666667			
					Standard Deviation	1.084044056	0.112815215			
1691		-45.1	158.8	21.7		13	1.4	X		
						12.3	1.5			
						12	1.6			
						11.1	1.3			
						11.5	1.4			
						10.6	0.8			
						11.9	0.9			
						11.4	1			
						10.4	1.5			
						11.4	1.1			
						12.4	1			
						11.3	1			
					Average	11.60833333	1.208333333			
					Standard Deviation	0.751311984	0.271220586			

1692		-41.8	157.9	16.4		12.5	1.6		X	
						11.1	1.3			
						7.4	0.6			
						9	0.9			
						9	0.8			
						7.8	0.7			
						10.5	1.2			
						11.5	1.1			
						11.7	1.2			
						8.5	1.3			
						9.5	0.9			
						9.4	0.8			
					Average	9.825	1.033333333			
					Standard Deviation	1.622077792	0.296443566			
1693		-49.7	156.0	7.4		10	0.7		X	
						11.1	1.1			
						11.4	1.2			
						12.4	1.6			
						9.2	0.8			
						9.4	0.5			
						8.9	0.4			
						9.5	0.7			
						10.4	1.3			
						11.4	1.4			
						10.1	1.3			
						10.9	1.1			
					Average	10.39166667	1.008333333			
					Standard Deviation	1.065541547	0.380091695			
1694		-38.4	157.7	19.6		12.4	1.4	X		
						12.1	1.2			
						11.2	0.9			
						10.7	0.9			
						10.4	0.9			

						9.6	0.9			
						8.9	0.8			
						10.9	1			
						10.7	0.8			
						11.6	1.4			
						11.9	1.2			
						12.7	1.7			
					Average	11.09166667	1.091666667			
					Standard Deviation	1.131739075	0.287491765			
1695		-35.3	155.2	12.7		8.1	0.6	X		
						8.9	0.6			
						7.1	0.6			
						6.8	0.6			
						6	0.5			
						6.3	0.6			
						7.2	0.8			
						8.5	1.5			
						9.8	1.2			
						7.9	0.7			
						9.4	0.9			
						8.5	0.7			
					Average	7.875	0.775			
					Standard Deviation	1.210653467	0.295803989			
1696		-35.8	151.9	9.4		7.5	0.9	X		
						9.3	1			
						8.7	0.8			
						7	1			
						8.5	0.7			
						6.4	0.7			
						5.7	0.5			
						8.2	0.6			
						7.9	0.7			
						7.5	0.7			
						8.4	0.9			

						7.9	0.9			
					Average	7.75	0.78333333			
					Standard Deviation	1.011299794	0.158592292			
1697		-33.7	152.7	14.1		8.4	0.9	X		
						10.4	1.2			
						9.9	1.1			
						9.5	1			
						9.8	0.9			
						8.6	0.8			
						8.4	0.8			
						7.9	0.7			
						6.6	0.5			
						9.4	0.9			
						7.8	0.8			
						9.5	0.9			
					Average	8.85	0.875			
					Standard Deviation	1.090871211	0.181533869			
1698		-35.1	159.5	20.5		9.4	0.9	X		
						11.9	1.1			
						9.1	0.8			
						4.8	0.7			
						4.9	0.8			
						6.4	0.8			
						5.2	0.4			
						6.3	0.6			
						7.2	0.7			
						10	1.1			
						10.8	1			
						7.4	0.7			
					Average	7.78333333	0.8			
					Standard Deviation	2.408256002	0.204494943			
1699		-28.5	153.6	15.8		5.9	0.7	X		
						5.8	0.6			

						4.7	0.7			
						5.8	0.7			
						7.6	0.7			
						7.3	0.9			
						6.6	0.8			
						7.5	0.6			
						6.8	1			
						7.3	0.9			
						5.4	0.7			
						6.1	0.6			
					Average	6.4	0.741666667			
					Standard Deviation	0.925399177	0.131137217			
1700		-27.5	156.3	8.5		5.2	0.7	X		
						4.3	0.6			
						2.2	0.4			
						0	0.3			
						0.7	0.3			
						2.4	0.3			
						3.8	0.5			
						4.5	0.7			
						5.7	0.7			
						5.1	0.8			
						5.6	0.7			
						4.7	0.6			
					Average	3.683333333	0.55			
					Standard Deviation	1.917779651	0.183402191			
1701	Wroblewski	-24.3	-152.6	24.4		4	0.8	X		
						4.7	0.6			
						3.9	0.8			
						4.5	0.6			
						4.4	0.5			
						3.8	0.5			
						4.3	0.5			
						2.9	0.5			

						4	0.6			
						3.6	0.5			
						5	0.9			
						4.2	0.8			
					Average	4.108333333	0.633333333			
					Standard Deviation	0.548482756	0.149747262			
1702		-24.5	159.6	17.5		9.6	0.8	X		
						9.3	1			
						10.1	1.3			
						8.8	0.9			
						6.9	0.6			
						5.5	0.4			
						9.2	1			
						9.3	1.1			
						9	0.9			
						9.6	1			
						8.7	1			
						7.6	0.8			
					Average	8.633333333	0.9			
					Standard Deviation	1.324134938	0.233549683			
1703		-26.6	150.8	27.3		4.4	0.6	X		
						3.9	0.8			
						3.7	0.5			
						4.2	0.5			
						5.3	0.5			
						2.9	0.5			
						3.5	0.5			
						2.2	0.5			
						2	0.4			
						2.7	0.5			
						6	0.9			
						4.7	0.6			
					Average	3.791666667	0.566666667			
					Standard Deviation	1.219134069	0.143548113			

1704	Gargarin	-20.7	150.3	14.1		0.7	0.4	X		
						0.5	0.3			
						0.2	0.3			
						0.4	0.1			
						0.6	0.3			
						0.1	0.3			
						1	0.3			
						3.1	0.7			
						1.6	0.4			
						2.1	0.4			
						0.5	0.4			
						1.4	0.3			
					Average	1.016666667	0.35			
					Standard Deviation	0.889160312	0.138169856			
1705		-18.2	150.4	12		4.6	0.7	X		
						2.3	0.6			
						0.1	0.6			
						0.2	0.6			
						0.6	0.3			
						1	0.3			
						2.3	0.6			
						1.3	0.5			
						1.1	0.7			
						1.9	0.5			
						4.3	0.5			
						4.7	0.7			
					Average	2.033333333	0.55			
					Standard Deviation	1.668604934	0.138169856			
1706		-17.5	154.4	21.8		6	0.6	X		
						6	0.7			
						4.6	0.7			
						5.2	0.7			
						5.3	0.7			

						4.7	0.7			
						6.1	0.7			
						5.1	0.8			
						5.7	0.7			
						5.3	0.5			
						5.3	0.7			
						5.1	0.7			
					Average	5.366666667	0.683333333			
					Standard Deviation	0.492365964	0.071774056			
1707		-11.6	156.1	9.2		2.4	0.7	X		
						1.5	0.4			
						1.3	0.8			
						2.1	0.7			
						2.9	0.6			
						3.9	0.7			
						2.6	0.5			
						2.2	0.5			
						2.5	0.6			
						3.1	0.7			
						2.4	0.7			
						2	0.7			
					Average	2.408333333	0.633333333			
					Standard Deviation	0.697343444	0.115470054			
1708		-14.5	156.1	15.8		3.8	0.5			
						2.5	0.5			
						2.6	0.4			
						3.2	0.3			
						4.1	0.5			
						4.3	0.5			
						4.5	0.5			
						3.7	0.6			
						4.7	0.5			
						4.5	0.5			
						4.5	0.4			

						4.8	0.6			
					Average	3.933333333	0.483333333			
					Standard Deviation	0.792388029	0.083484711			
1709		-15.0	152.5	15		6	0.6	X		
						4.8	0.7			
						4.3	0.6			
						4.1	0.4			
						2.2	0.5			
						4	0.6			
						4	0.5			
						4.2	0.6			
						4.3	0.6			
						5	0.6			
						4.8	0.8			
						5.1	0.5			
					Average	4.4	0.583333333			
					Standard Deviation	0.906541881	0.10298573			
1710		-7.9	151.1	18.1		2.3	0.6	X		
						0.8	0.3			
						2	0.5			
						1.4	0.5			
						0.5	0.4			
						0.4	0.4			
						1.2	0.3			
						2.5	0.6			
						1.8	0.2			
						2.8	0.5			
						1.1	0.5			
						1.9	0.5			
					Average	1.558333333	0.441666667			
					Standard Deviation	0.783301095	0.124011241			
1711		-6.1	154.9	14.9		3.4	0.6	X		
						3.8	0.4			

						4.5	0.4			
						2.9	0.3			
						2.3	0.5			
						1.4	0.4			
						2.9	0.5			
						1.7	0.4			
						3.3	0.3			
						3.6	0.3			
						2.5	0.5			
						1.6	0.5			
					Average	2.825	0.425			
					Standard Deviation	0.958336627	0.09653073			
1712		-0.3	157.2	17.9		1.2	0.4	X		
						1.7	0.3			
						1.5	0.4			
						0	0.3			
						1	0.4			
						0.4	0.5			
						1.1	0.4			
						2.3	0.2			
						1.8	0.4			
						1.5	0.5			
						0.7	0.4			
						1	0.5			
					Average	1.183333333	0.391666667			
					Standard Deviation	0.633652232	0.090033664			
1713		-2.0	152.5	22		2	0.5	X		
						1.8	0.5			
						3.1	0.6			
						3	0.5			
						2.8	0.4			
						2.7	0.5			
						2.1	0.5			
						1.9	0.5			

						1.5	0.5			
						1.6	0.5			
						1.9	0.5			
						1.1	0.5			
					Average	2.125	0.5			
					Standard Deviation	0.635502664	0.042640143			
1714		-4.4	158.0	18.1		1.1	0.3	X		
						0.7	0.2			
						0.2	0.3			
						1.7	0.3			
						1	0.4			
						1.9	0.5			
						1.9	0.4			
						0.6	0.3			
						1.2	0.4			
						0.9	0.3			
						1	0.3			
						1.3	0.4			
					Average	1.125	0.341666667			
					Standard Deviation	0.518958748	0.079296146			
1715		-5.2	165.9	12.5		4.2	0.6	X		
						4.3	0.6			
						5.6	0.7			
						5.7	0.8			
						4.9	0.9			
						4.5	0.7			
						4	0.6			
						3.3	0.6			
						3.3	0.4			
						3.9	0.6			
						3.4	0.5			
						4.4	0.5			
					Average	4.291666667	0.625			
					Standard Deviation	0.805050347	0.135680105			

1716		-2.9	167.5	18.7		8.6	1.2	X		
						8.6	1.1			
						8.8	1.3			
						8.2	1.2			
						9.4	1.2			
						8.6	1.2			
						8.1	1.2			
						9.8	1.2			
						10	1.5			
						8.8	1.1			
						8.5	1.1			
						8.2	1.1			
					Average	8.8	1.2			
					Standard Deviation	0.619383858	0.112815215			
1717		-5.9	163.3	18.2		0.8	0.4	X		
						1.7	0.5			
						1.9	0.5			
						3.1	0.4			
						2	0.4			
						2.4	0.4			
						2.3	0.4			
						2.4	0.5			
						2	0.4			
						1.4	0.4			
						1.3	0.4			
						2.5	0.4			
					Average	1.983333333	0.425			
					Standard Deviation	0.622068884	0.045226702			
1718		-2.6	160.8	17.8		2.4	0.5	X		
						3	0.4			
						1.8	0.4			
						2.9	0.4			
						2.7	0.4			

						2	0.5			
						3.2	0.5			
						2.8	0.5			
						3.3	0.4			
						2.3	0.5			
						2.5	0.5			
						2	0.4			
					Average	2.575	0.45			
					Standard Deviation	0.490129853	0.052223297			
1719		-7.4	165.0	15		1.2	0.3	X		
						2.5	0.5			
						2.6	0.5			
						1.8	0.4			
						2.4	0.4			
						2.2	0.3			
						1.9	0.5			
						1.8	0.5			
						2.8	0.3			
						2	0.3			
						2.9	0.4			
						1.4	0.4			
					Average	2.125	0.4			
					Standard Deviation	0.536190265	0.085280287			
1720	Plante	-10.5	163.1	40.9		2.2	0.3	X		
						0.6	0.3			
						1.7	0.3			
						1.3	0.3			
						1.5	0.3			
						1.2	0.3			
						0.4	0.3			
						0.8	0.3			
						1.8	0.3			
						2.1	0.3			
						0.4	0.3			

						0.1	0.3			
					Average	1.175	0.3			
					Standard Deviation	0.70855166	6.35388E-09			
1721	Zwicky "N"	-16.2	167.4	23.8		4.1	0.5	X		
						2.7	0.5			
						4.2	0.5			
						3.6	0.5			
						2.7	0.4			
						4	0.5			
						1.6	0.5			
						3.2	0.7			
						2	0.4			
						2.6	0.4			
						3.5	0.4			
						3.2	0.5			
					Average	3.116666667	0.483333333			
					Standard Deviation	0.824437366	0.083484711			
1722		-15.3	164.6	17.5		1.7	0.4	X		
						4.8	0.4			
						4.5	0.5			
						4	0.5			
						4	0.5			
						3.9	0.6			
						4.7	0.6			
						4.5	0.5			
						3.3	0.6			
						5.4	0.7			
						5.4	0.5			
						5.4	0.5			
					Average	4.3	0.525			
					Standard Deviation	1.053996722	0.08660254			
1723		-19.1	167.7	7.3		7.4	1	X		
						6.3	0.2			

						7.2	0.2			
						6.4	0.4			
						5.8	0.2			
						6.9	0.3			
						4.9	0.4			
						6.9	0.6			
						5	0.4			
						6.9	0.5			
						6.2	0.3			
						6.3	0.4			
					Average	6.35	0.408333333			
					Standard Deviation	0.797154029	0.223437334			
1724		-19.8	164.6	10		7.5	0.6	X		
						6.1	0.8			
						6.9	0.6			
						5.6	0.7			
						6.4	0.6			
						6.4	0.8			
						7	0.7			
						7	0.6			
						8.3	0.7			
						7.3	0.9			
						8.2	0.9			
						7.5	0.6			
					Average	7.016666667	0.708333333			
					Standard Deviation	0.809975682	0.116450015			
1725		-22.0	166.9	21.2		9.1	0.8	X		
						7.2	0.8			
						7.3	0.7			
						4	0.5			
						3.9	0.4			
						2.7	0.4			
						3.3	0.5			
						4.2	0.4			

						3.2	0.5			
						7.1	0.8			
						7.8	0.8			
						7.9	1.2			
					Average	5.641666667	0.65			
					Standard Deviation	2.274945887	0.243086217			
1726		-26.1	166.1	9.6		9	0.4	X		
						10.6	1.1			
						9	0.6			
						8.8	0.6			
						8.7	0.5			
						6.4	0.5			
						6.8	0.7			
						6.6	0.6			
						0.8	0.5			
						7.7	0.3			
						9.4	0.6			
						7.9	0.7			
					Average	7.641666667	0.591666667			
					Standard Deviation	2.490147251	0.197522534			
1727		-29.4	163.8	6.8		9.7	1.1	X		
		Mare Ingenii				8.4	0.7			
						7.8	0.9			
						8.1	0.9			
						7.4	0.7			
						7.5	0.7			
						7.6	0.7			
						9.3	1			
						9.3	0.9			
						6.6	0.7			
						8.3	0.7			
						9.6	1			
					Average	8.3	0.833333333			
					Standard Deviation	0.989949494	0.149747262			

1728		-25.6	161.9	9.5		6.8	1	X		
						4.9	0.6			
						4.1	0.4			
						4.8	0.6			
						9.6	0.5			
						6.5	0.5			
						7.3	0.6			
						9.9	0.7			
						10.8	1			
						6.7	0.9			
						6.3	0.9			
						7.2	2			
					Average	7.075	0.808333333			
					Standard Deviation	2.093333575	0.427377486			
1729		-21.8	162.7	28.1		7.8	0.8	X		
						7	0.7			
						6.8	0.6			
						5.5	0.6			
						3.7	0.6			
						5	0.6			
						5.1	0.5			
						5.7	0.6			
						6.6	1			
						5.1	0.5			
						8.1	1.1			
						8.3	1.1			
					Average	6.225	0.725			
					Standard Deviation	1.432813507	0.222076973			
1730		-30.6	163.7	13.9		7.5	1.1	X		
						8	0.7			
						8.7	0.9			
						4.6	0.1			
						6.7	0.8			

						5.6	0.4			
						4.1	0.6			
						4.5	0.5			
						6.2	0.6			
						7.3	0.8			
						8	0.8			
						5.7	0.7			
					Average	6.408333333	0.666666667			
					Standard Deviation	1.532353112	0.257022579			
1731		-31.0	162.2	12.7		9.9	0.9		X	
						10.8	1.1			
						8.8	0.8			
						8.5	0.8			
						8	0.9			
						7.3	0.8			
						8	0.9			
						9.4	1.1			
						9	1			
						10	1.1			
						10	1.3			
						8.6	0.3			
					Average	9.025	0.916666667			
					Standard Deviation	1.024362329	0.248022482			
1732		-35.0	166.3	10		12.8	0.9		X	
						13.1	1.2			
						11.7	1.2			
						11.4	1.3			
						11	1.1			
						9.4	1.1			
						11.1	0.9			
						10	1.2			
						11.8	1.5			
						13.4	1.5			
						10.7	1.4			

					13	1.3			
				Average	11.61666667	1.216666667			
				Standard Deviation	1.271958642	0.199240984			
1733	-38.8	161.1	13.4		12.5	1.3	X		
					12.4	1.6			
					11.9	1.4			
					11.8	1.8			
					10.6	0.9			
					9.7	1			
					9	0.8			
					8.2	0.7			
					10.7	1			
					9.8	0.9			
					12.2	1.3			
					13.8	1.4			
				Average	11.05	1.175			
				Standard Deviation	1.655019912	0.34145411			
1734	-39.2	166.6	16.7		11.8	1.7	X		
					11.8	1.5			
					11.8	1.1			
					11.4	1.3			
					11.2	1.4			
					11.7	1.5			
					13.5	1.8			
					11	1.2			
					10.9	1.5			
					12.2	1.4			
					12.5	1.4			
					12.6	1.8			
				Average	11.86666667	1.466666667			
				Standard Deviation	0.745084905	0.218812221			
1735	-43.7	162.8	11.5		14.5	1.8	X		
					12.8	1.1			

						13	1.6			
						14.5	1.7			
						11	1.2			
						11.9	1.5			
						13.8	1.7			
						14.2	2.1			
						14.2	1.7			
						12.6	1.4			
						9.9	1.1			
						11.4	1.2			
					Average	12.81666667	1.508333333			
					Standard Deviation	1.51347483	0.314666731			
1736		-47.1	166.9	16.8		12.2	1.3		X	
						13.5	1.6			
						14.2	1.9			
						11.5	0.7			
						10.9	1			
						12.4	1.6			
						11.4	0.9			
						12.4	1.1			
						12.2	0.8			
						12.4	1.5			
						13.5	1.7			
						10.4	1			
					Average	12.25	1.258333333			
					Standard Deviation	1.109053651	0.394181161			
1737		-48.1	161.2	14		13.1	1.4		X	
						12.8	1.4			
						11.2	1			
						10.8	1.2			
						10.4	1.1			
						9.7	0.9			
						9.7	0.6			
						9.9	0.4			

						11.1	1.4			
						10.8	1.4			
						13.3	1.5			
						13.3	1.6			
					Average	11.34166667	1.158333333			
					Standard Deviation	1.411291049	0.372847357			
1738		-43.0	161.5	7.3		13.3	1.8	X		
						12.8	1.1			
						10.9	1			
						11.4	0.9			
						11.1	1.1			
						11.9	1.6			
						11.6	1.1			
						12.2	1.1			
						13.7	1.6			
						13.5	1.6			
						13.6	2.2			
						12.8	1.3			
					Average	12.4	1.366666667			
					Standard Deviation	1.015336935	0.391578004			
1739		-49.6	161.6	9.9		13.3	1.1	X		
						12.2	1.3			
						11.7	0.9			
						12.7	1.1			
						11	0.8			
						10.7	1			
						11.2	0.8			
						12.7	1.4			
						12.8	1.9			
						14.4	1.8			
						13.3	1.6			
						12.7	1.2			
					Average	12.39166667	1.241666667			
					Standard Deviation	1.081630363	0.370401093			

1740		-52.5	163.5	8		11.7	0.7			
						10.3	0.9			X
						13.4	0.8			
						11.2	1			
						11.2	0.8			
						10.7	0.4			
						9.6	0.4			
						10.1	0.5			
						10.4	0.6			
						11.8	0.8			
						12	1.3			
						10.3	0.5			
					Average	11.05833333	0.725			
					Standard Deviation	1.050072148	0.266714011			
1741		-54.1	160.9	18		12.6	0.8			
						12.6	0.8			X
						11	0.4			
						9.5	0.4			
						10.3	0.8			
						10	0.5			
						9.6	0.4			
						7.6	0.3			
						7.9	0.3			
						12.2	0.9			
						5.2	0.4			
						9.9	0.7			
					Average	9.866666667	0.558333333			
					Standard Deviation	2.192272931	0.223437334			
1742		-54.8	168.4	18.7		13.6	0.9			
						14.8	1.5			X
						12.2	1.2			
						9.9	0.7			
						8.7	0.6			

						8.8	0.6			
						10.1	0.5			
						11.8	0.5			
						12.8	0.9			
						12.4	0.7			
						14.2	1.4			
						13.9	1			
					Average	11.93333333	0.875			
					Standard Deviation	2.106843107	0.34145411			
1743		-57.4	162.4	9.3		14	1.2			
						15.5	2.1		X	
						13.7	1.6			
						12.4	1.4			
						10.1	1			
						11	1			
						10	0.9			
						11.4	0.9			
						13.8	1			
						14.1	1.2			
						14.4	1.2			
						13.8	1			
					Average	12.85	1.208333333			
					Standard Deviation	1.815338686	0.350216383			
1744		-57.4	165.9	8.5		14	1.2			
						14.3	1.5		X	
						13	1.2			
						9.3	0.6			
						10.5	0.9			
						9.3	0.5			
						8.1	0.5			
						10.7	0.6			
						9	0.5			
						8.5	0.8			
						12.8	0.9			

						11.6	0.7			
					Average	10.925	0.825			
					Standard Deviation	2.178458588	0.327871926			
1745		-61.5	168.0	9		11.8	0.7			
						10	0.6			X
						12.1	1.2			
						11.7	0.8			
						10.7	0.7			
						10.2	0.7			
						12	0.5			
						12.2	1.1			
						10.8	0.6			
						10.9	0.5			
						10.4	0.9			
						11.5	0.7			
					Average	11.19166667	0.75			
					Standard Deviation	0.782139645	0.219503572			
1746		-61.0	163.2	8.5		12	0.5			
						10.1	0.5			X
						12.4	0.9			
						13.5	1			
						13.2	1.4			
						12.3	0.8			
						10.4	0.7			
						9.6	0.5			
						12.2	1.2			
						11.1	0.9			
						10.3	0.5			
						12.8	0.8			
					Average	11.65833333	0.808333333			
					Standard Deviation	1.309030407	0.293747985			
1747		-67.4	166.2	6.6		6.2	0.3			
						8	0.6			X

						11.6	1.8			
						8.3	0.7			
						8.3	0.5			
						5.4	0.2			
						5.8	0.2			
						8.3	0.5			
						8.9	0.5			
						9.1	0.6			
						6.8	0.4			
						7.3	0.4			
					Average	7.833333333	0.558333333			
					Standard Deviation	1.697234828	0.420947704			
1748		-69.9	165.7	7.5		9.9	0.6			
						8.3	0.5			X
						5.2	0.2			
						3	0.1			
						7.1	0.5			
						7.9	0.6			
						9.4	0.7			
						11.7	1.4			
						8.9	0.4			
						8.1	0.3			
						8.3	0.3			
						9.7	1.7			
					Average	8.125	0.608333333			
					Standard Deviation	2.268810261	0.477604502			
1749		-67.7	178.0	8.5		13.2	0.6			
						11.5	0.5			X
						13.2	1.4			
						8.8	0.2			
						11.1	0.6			
						10.4	0.5			
						9.8	0.5			
						10.1	0.4			

						13.9	1.1			
						14.4	0.9			
						11.8	0.5			
						13.1	0.7			
					Average	11.775	0.658333333			
					Standard Deviation	1.788917906	0.328794861			
1750		-62.0	174.9	27.5		13.3	1			
						14.3	1.5		X	
						11.6	1.1			
						10.3	1.3			
						10.6	0.9			
						10.8	0.6			
						9.5	0.5			
						8.7	0.5			
						12.1	0.9			
						12.7	1			
						13.4	1.4			
						14.2	1.5			
					Average	11.79166667	1.016666667			
					Standard Deviation	1.842655363	0.361394605			
1751		-61.0	177.8	13		13.7	1.3			
						12	0.5		X	
						13.5	1.1			
						13.4	1.4			
						10.9	0.8			
						10	0.7			
						10.5	0.6			
						11.5	0.6			
						12.4	0.8			
						13.1	0.8			
						9.4	0.4			
						12.6	0.7			
					Average	11.91666667	0.808333333			
					Standard Deviation	1.452792504	0.308834564			

1752		-63.8	172.9	25		17.3	2.7			
						18.5	5.8			X
						15.1	1.7			
						10.2	0.5			
						7.3	0.3			
						8.7	0.4			
						8.6	0.5			
						10	0.6			
						11	0.7			
						9.7	0.4			
						12.5	0.9			
						13.5	0.9			
					Average	11.86666667	1.283333333			
					Standard Deviation	3.571435498	1.579317075			
1753		-67.0	171.7	6.5		15.8	1.8			
						15.6	2			X
						11.2	0.4			
						10.8	0.5			
						8.7	0.4			
						7.8	0.3			
						6.8	0.3			
						13.2	1			
						12.9	1			
						1.7	1.2			
						13.9	1.3			
						16.3	2.7			
					Average	11.225	1.075			
					Standard Deviation	4.35141043	0.771215098			
1754		-56.4	173.2	24.4		11.9	0.4			
						13.2	0.7			X
						11.2	0.7			
						13.7	1			
						11.2	0.9			

						9.6	0.6			
						9.2	0.5			
						9.6	0.8			
						8.7	0.6			
						8.5	0.5			
						10.4	0.6			
						12.7	0.9			
					Average	10.825	0.683333333			
					Standard Deviation	1.773607008	0.185047087			
1755		-58.6	177.3	24		14.8	0.8			
						13.3	0.6		X	
						12.5	0.5			
						13	0.6			
						12.2	0.3			
						10.9	0.3			
						11.6	0.4			
						11.6	0.3			
						12.3	0.4			
						10.9	0.6			
						11.7	0.5			
						13.2	0.5			
					Average	12.33333333	0.483333333			
					Standard Deviation	1.121957164	0.152752523			
1756		-54.6	178.8	10		12.4	0.8			
						11.5	0.8		X	
						12	0.8			
						12.1	1.1			
						11	0.7			
						11.2	0.6			
						12.1	0.8			
						12.8	0.9			
						14.1	1.2			
						12.8	0.8			
						12.1	0.7			

					10.7	0.6			
				Average	12.06666667	0.816666667			
				Standard Deviation	0.924744027	0.180067327			
1757	-51.4	176.0	9.2		11.2	0.5			
					8.8	0.9		X	
					8.6	0.4			
					7.3	0.4			
					8.5	0.5			
					7.3	0.3			
					11.6	0.7			
					11.9	0.7			
					11.4	0.5			
					10.9	0.8			
					11.4	0.7			
					7.8	0.3			
				Average	9.725	0.558333333			
				Standard Deviation	1.821650101	0.197522534			
1758	-53.6	174.5	7.2		14.9	1.8			
					15.2	1.8		X	
					11.6	1.1			
					1.5	0.9			
					13.4	1.2			
					13	1.3			
					14.2	1.3			
					11.8	0.9			
					12.3	1			
					14.3	1.2			
					14.4	1.7			
					13.9	1.3			
				Average	12.54166667	1.291666667			
				Standard Deviation	3.669644108	0.320392751			
1759	-48.8	176.3	6.4		10.4	0.8		X	
					11.8	1.2			

						11.5	0.8			
						10.8	0.7			
						10.6	0.7			
						8.9	0.5			
						8.5	0.6			
						9.5	0.4			
						11.3	0.5			
						11.6	0.6			
						11.3	0.7			
						12.8	1.1			
					Average	10.75	0.716666667			
					Standard Deviation	1.257342074	0.23677121			
1760		-46.7	172.2	15		10	0.8	X		
						9.7	0.8			
						11.6	0.7			
						10.6	0.8			
						10.4	1			
						9.9	1			
						8.8	1.1			
						8.9	0.7			
						9.4	0.6			
						10.2	0.7			
						10.4	0.6			
						12.3	1.1			
					Average	10.18333333	0.825			
					Standard Deviation	1.012497662	0.181533869			
1761		-44.0	177.8	11.1		13.5	1.6	X		
						12.9	1.5			
						11.5	1			
						9.7	0.8			
						11	0.9			
						11.7	0.8			
						11.2	0.9			
						11.8	0.8			

						12.3	1.2			
						12.8	1			
						11.2	0.8			
						11.5	0.8			
					Average	11.75833333	1.008333333			
					Standard Deviation	1.013058675	0.281096338			
1762		-40.2	171.7	28.6		12.1	1.8	X		
						11.1	0.8			
						9.9	0.7			
						8	2.2			
						9.2	1.4			
						8.3	0.8			
						8.3	0.7			
						9.2	0.8			
						10.3	1			
						12.3	1.2			
						12.4	1.1			
						10.7	0.7			
					Average	10.15	1.1			
					Standard Deviation	1.596871942	0.482418151			
1763		-32.7	174.1	23.1		13.3	1.9	X		
						12.5	1.6			
						11.9	1.6			
						11.7	1.5			
						12.3	1.6			
						12.1	1.6			
						11.5	1.6			
						11.8	1.4			
						12.4	1.8			
						12.8	1.9			
						13.3	1.6			
						12.9	1.9			
					Average	12.375	1.666666667			
					Standard Deviation	0.606217783	0.166969422			

1764		-30.9	170.8	8.6		11.1	1.1	X		
						9.4	1			
						11.3	1.1			
						9	0.7			
						7.9	0.8			
						8.1	0.8			
						9.3	0.8			
						7.1	0.8			
						6.7	0.6			
						7.1	0.7			
						10	1			
						8.3	1.1			
					Average	8.775	0.875			
					Standard Deviation	1.518447173	0.17645499			
1765		-27.1	174.5	18		10.4	1.1	X		
						9.9	0.8			
						9.7	1.1			
						9.2	1			
						9	0.9			
						8.7	0.8			
						9.2	1			
						10	1			
						10.4	1.2			
						10.5	1.2			
						9.6	0.9			
						9.5	0.7			
					Average	9.675	0.975			
					Standard Deviation	0.586398871	0.160255478			
1766		-26.8	172.6	17.4		11.8	1.3	X		
						10.3	1.3			
						10.5	1.2			
						10.6	1			
						7.1	1			

						10.4	1.6			
						11.2	1.3			
						10.5	1.4			
						11.4	1.9			
						10.6	1.5			
						11.6	1.8			
						11.2	1.3			
					Average	10.6	1.383333333			
					Standard Deviation	1.213559752	0.279067712			
1767		-20.4	171.8	26.3		5.9	0.4	X		
						3.8	0.4			
						4.3	0.4			
						3.3	0.3			
						3.7	0.5			
						3.9	0.4			
						4.5	0.3			
						5.5	0.4			
						4.3	0.3			
						4.8	0.5			
						5.3	0.4			
						5.4	0.4			
					Average	4.558333333	0.391666667			
					Standard Deviation	0.824023757	0.066855792			
1768		-23.3	174.3	7		9	1.3	X		
						9.7	1.2			
						9.6	1.2			
						9.3	1			
						9.7	1			
						7.7	0.8			
						6.8	0.5			
						6.2	0.6			
						6.6	0.7			
						7.7	0.9			
						7.1	1			

						5.4	0.7			
					Average	7.9	0.908333333			
					Standard Deviation	1.516575089	0.253908836			
1769		-22.0	177.1	6.5		8.3	0.9	X		
						8.6	1			
						9.6	1			
						9.1	1			
						8.1	0.9			
						8.4	0.9			
						8	0.7			
						7.2	0.7			
						9	0.9			
						8.8	0.9			
						8.9	0.8			
						9	0.7			
					Average	8.583333333	0.866666667			
					Standard Deviation	0.63221592	0.115470054			
1770		-17.9	172.5	6.5		7.1	1.1	X		
						6.1	1			
						5	0.8			
						6.4	1			
						5.5	0.8			
						5	0.7			
						5.6	1			
						6.2	0.9			
						4.2	0.8			
						5.4	0.9			
						8.2	1.1			
						6.5	0.9			
					Average	5.933333333	0.916666667			
					Standard Deviation	1.064581295	0.126730446			
1771		-18.3	175.3	10.8		2.7	0.4	X		
						3.9	0.4			

						3	0.5			
						3.3	0.5			
						2.1	0.5			
						4.4	0.4			
						2.9	0.5			
						3.4	0.5			
						3.4	0.7			
						3.4	0.6			
						2.7	0.4			
					Average	3.2	0.490909091			
					Standard Deviation	0.595437196	0.089995409			
1772		-10.1	175.8	18.2		3.3	0.5	X		
						3.3	0.4			
						1.9	0.4			
						0.8	0.4			
						2.9	0.3			
						2.6	0.5			
						3	0.4			
						3.2	0.4			
						3.5	0.5			
						4	0.5			
						3.9	0.4			
						3.5	0.4			
					Average	2.991666667	0.425			
					Standard Deviation	0.891840113	0.062158156			
1773		-12.1	172.7	33.8		4	0.4	X		
						3.8	0.5			
						3.5	0.4			
						2.9	0.5			
						2.2	0.4			
						2.5	0.3			
						2.4	0.5			
						4	0.5			
						3.8	0.5			

1776		-6.9	172.7	22.5		2	0.4	X		
						3.2	0.4			
						2.5	0.3			
						2.2	0.3			
						2.1	0.3			
						2.3	0.4			
						0.8	0.3			
						0.7	0.3			
						1.9	0.4			
						2.6	0.3			
						2	0.5			
						2.7	0.4			
					Average	2.083333333	0.358333333			
					Standard Deviation	0.722160059	0.066855792			
1777		-0.6	170.6	12.8		2.7	0.4	X		
						2.5	0.4			
						2	0.4			
						1.6	0.5			
						1.9	0.4			
						1.4	0.4			
						3	0.3			
						2	0.4			
						2.8	0.3			
						1.8	0.4			
						2.1	0.4			
						1.1	0.4			
					Average	2.075	0.391666667			
					Standard Deviation	0.580164553	0.051492865			
1778		-5.6	172.5	8.8		3.5	0.6	X		
						2	0.5			
						3.1	0.5			
						2.3	0.5			
						3	0.6			
						2.5	0.6			

						2.9	0.5			
						4	0.4			
						3.7	0.5			
						2.2	0.5			
						3.3	0.5			
						3.7	0.5			
					Average	3.016666667	0.516666667			
					Standard Deviation	0.654818966	0.057735027			
1779	Lipsky	-1.4	178.6	32.6		1	0.4	X		
						1.9	0.4			
						2.6	0.5			
						1.7	0.4			
						2	0.4			
						1.3	0.4			
						1.9	0.5			
						2.5	0.5			
						1.9	0.4			
						0.8	0.5			
						2.8	0.5			
						3.1	0.4			
					Average	1.958333333	0.441666667			
					Standard Deviation	0.706410045	0.051492865			South-East Quadrant completed
1780		-1.2	-176.7	11.6		1.1	0.3	X		
			183.3			1.3	0.4			South West Quadrant commences
						1.9	0.4			
						2.5	0.4			
						1.2	0.4			
						0.4	0.4			
						2.3	0.3			
						1.9	0.4			
						1.5	0.3			
						1.4	0.4			
						0.8	0.4			
						1.8	0.6			

				Average	1.508333333	0.391666667			
				Standard Deviation	0.606717447	0.079296146			
1781	-7.4	-173.2	16.8		3.6	0.7	X		
		186.8			3.7	0.4			
					4.8	0.3			
					1.6	0.4			
					1.9	0.5			
					2.6	0.5			
					2.8	0.6			
					1.4	0.5			
					3.4	0.4			
					3	0.4			
					3.3	0.5			
					3.5	0.6			
				Average	2.966666667	0.483333333			
				Standard Deviation	0.977318533	0.111464086			
1782	-8.4	-178.8	25.7		2.6	0.4	X		
		181.2			2.4	0.5			
					3	0.5			
					1.1	0.4			
					2.5	0.4			
					1.4	0.5			
					2.4	0.4			
					3.3	0.5			
					3	0.5			
					1.8	0.5			
					2.7	0.4			
					1.4	0.4			
				Average	2.3	0.45			
				Standard Deviation	0.713506068	0.052223297			
1783	-2.6	-170.3	15		2.3	0.7	X		
		189.7			4.1	0.7			
					1.9	0.6			

						2.8	0.5			
						3.1	0.4			
						1.9	0.4			
						3	0.5			
						3.3	0.5			
						4.3	0.7			
						3.3	0.6			
						4.6	0.6			
						3.9	0.8			
					Average	3.208333333	0.583333333			
					Standard Deviation	0.898947196	0.126730446			
1784		-11.9	-175.5	38.5		1.7	0.5	X		
			184.5			1.7	0.5			
						2.3	0.4			
						1	0.4			
						1.5	0.3			
						1.2	0.3			
						1.4	0.5			
						2.3	0.4			
						0.7	0.4			
						3.4	0.5			
						2.6	0.5			
						2.1	0.5			
					Average	1.825	0.433333333			
					Standard Deviation	0.754531763	0.077849894			
1785		-14.4	-176.9	12.7		3.5	0.5	X		
			183.1			4.6	0.8			
						2.4	0.5			
						3.3	0.5			
						4.3	0.5			
						4.6	0.5			
						3.9	0.6			
						3.2	0.5			
						4.3	0.6			

						3.4	0.5			
						4.4	0.5			
						4.5	0.6			
					Average	3.86666667	0.55			
					Standard Deviation	0.701081416	0.090453403			
1786		-16.3	-172.6	17		6	0.6	X		
			187.4			5.8	0.7			
						4.3	0.7			
						3.1	0.5			
						4.1	0.5			
						3.8	0.6			
						4.1	0.6			
						5.7	0.8			
						4.6	0.6			
						6.4	0.6			
						5.3	0.7			
						4.3	0.8			
					Average	4.79166667	0.64166667			
					Standard Deviation	1.021103087	0.099620492			
1787		-19.1	-174.6	20.1		6.9	0.6	X		
			185.4			7	0.7			
						6.8	0.6			
						5.7	0.7			
						5.8	0.7			
						5.3	0.7			
						6.3	0.7			
						6.2	0.7			
						6.1	0.8			
						6.4	0.7			
						6.1	0.6			
						5.7	0.7			
					Average	6.19166667	0.683333333			
					Standard Deviation	0.52476546	0.057735027			

1788		-20.9	-178.6	13.6		7.5	1	X		
			181.4			10	0.9			
						8.2	0.8			
						6.4	0.8			
						6.1	0.6			
						4.1	0.6			
						5.4	0.6			
						6	0.5			
						4.6	0.9			
						6.2	0.9			
						8.6	0.9			
						7.8	1			
					Average	6.741666667	0.791666667			
					Standard Deviation	1.722291462	0.172986249			
1789	Bok	-20.8	-171.7	39.8		10.2	1.8	X		
			188.3			9.2	1.6			
						6.8	1			
						8	1.5			
						8.6	1.3			
						7.3	1.3			
						6.8	1.4			
						8.6	1.3			
						8.8	1.3			
						8	1.2			
						7.7	1.3			
						10.6	1.8			
					Average	8.383333333	1.4			
					Standard Deviation	1.209683154	0.23741027			
1790		-29.3	-174.7	12.5		8.9	1	X		
			185.3			8.4	0.8			
						11.2	1			
						10.2	1.1			
						10	1.1			

						7.8	1			
						7.9	1			
						9.8	1.1			
						9.4	1			
						8.8	1.1			
						10.6	1			
						10.1	0.8			
					Average	9.425	1			
					Standard Deviation	1.076294147	0.104446594			
1791		-26.4	-170.7	8		12.1	1.1	X		
						11	1			
						12.3	1			
						11.5	0.9			
						11.4	0.6			
						11.9	0.8			
						11.7	0.8			
						11.5	1.2			
						11.7	1.2			
						12.4	1.5			
						12.1	1.2			
						11.8	1.1			
					Average	11.78333333	1.033333333			
					Standard Deviation	0.404145188	0.238683257			
1792		-34.2	-177.5	14.6		11.4	1.1	X		
			182.5			12	1.4			
						12.5	1.6			
						11.2	1.2			
						11.2	1.1			
						10.5	1			
						11	1.3			
						10.7	1.4			
						11.4	1.5			
						12.1	1.5			
						11.9	0.9			

					11.2	0.9			
				Average	11.425	1.241666667			
				Standard Deviation	0.594099777	0.242930343			
1793	-31.1	-170.6	15.2		13.6	1.8	X		
		189.4			13.9	1.6			
					12.9	1.7			
					12.6	2			
					12	1.9			
					11.8	2			
					11.3	1.8			
					11.4	1.7			
					12.6	2			
					12.2	2.2			
					13.4	1.4			
					13.2	1.6			
				Average	12.575	1.808333333			
				Standard Deviation	0.856127646	0.223437334			
1794	-36.8	-172.3	10		13.2	1.6	X		
		187.7			13.6	1.7			
					13.1	1.8			
					12.8	1.5			
					10.8	1			
					10.7	1.2			
					10	1.5			
					10.8	1.4			
					11	1			
					12.2	1.2			
					12.6	1.3			
					12.1	1.5			
				Average	11.90833333	1.391666667			
				Standard Deviation	1.195794398	0.257464325			
1795	-35.9	-170.3	8.5		12.5	1.6	X		
		189.7			13.5	1.9			

						13.5	2.2			
						13.2	1.9			
						1.4	1.7			
						12.1	1.5			
						11.2	1.9			
						10.9	1.5			
						11.9	1.7			
						13.9	1.5			
						12.6	1.4			
						12.2	1.5			
					Average	11.575	1.691666667			
					Standard Deviation	3.333882531	0.23915888			
1796		-39.8	-171.7	11		13.4	1.6		X	
			188.3			13.8	1.3			
						13.7	1.2			
						12.8	1			
						12.8	1.3			
						11.8	1.4			
						12.2	1.1			
						11.4	1.2			
						9.8	0.9			
						10.1	0.7			
						12.3	1.5			
						13.1	1.3			
					Average	12.26666667	1.208333333			
					Standard Deviation	1.304072874	0.253908836			
1797		-40.7	-171.0	20		13.2	1.4		X	
			189.0			12.6	2			
						11.7	0.4			
						11	1.2			
						11.2	0.7			
						10.8	0.9			
						10.3	0.1			
						11.8	1.3			

						11.6	1.2			
						11.4	1.1			
						11.8	0.8			
						12.6	1.3			
					Average	11.66666667	1.033333333			
					Standard Deviation	0.824988521	0.497874269			
1798		-40.5	-176.3	10.3		13.2	1.3		X	
			184.7			14.3	1.5			
						13	1.2			
						13.3	1.3			
						11.4	1.9			
						10.9	1.9			
						11.7	1			
						1.5	1			
						11.6	1			
						12.1	1			
						14	1.3			
						13.6	1.2			
					Average	11.71666667	1.3			
					Standard Deviation	3.399153192	0.321926022			
1799		-47.4	-179.0	13		12.6	1		X	
			181.0			9.9	0.6			
						10.3	0.9			
						12.1	1.2			
						10.6	0.9			
						9.6	0.7			
						10.4	1.1			
						11.1	1			
						13.5	1.3			
						10.9	1			
						11.2	1			
						11.2	1.4			
					Average	11.11666667	1.008333333			
					Standard Deviation	1.133645233	0.227469612			

1800		-48.2	-173.5	15		14.7	1.7		X	
			186.5			14.1	1.4			
						14	1.5			
						13.5	1.4			
						13	1.2			
						12.7	1.4			
						12.8	1			
						12	1.3			
						13.7	1.9			
						14.3	1.3			
						13.3	1.2			
						13.7	1.2			
				Average	13.48333333		1.375			
				Standard Deviation	0.764951969		0.241679728			
1801		-42.7	-174.0	8.5		13	1.8		X	
			186.0			12.8	1.4			
						12.2	1.3			
						11.6	0.8			
						11.9	0.5			
						11.6	0.8			
						12.2	1.1			
						13.7	1.7			
						11.3	1			
						12.5	1.9			
						13.2	1.4			
						13.5	1.7			
				Average	12.45833333		1.283333333			
				Standard Deviation	0.789082705		0.44890439			
1802		-52.3	-178.8	17		13.4	1.3			
			181.2			9.7	0.7		X	
						11.3	0.8			
						12.6	1.1			
						12.3	0.8			

						11.2	1.4			
						11.6	1.4			
						11.2	0.9			
						11.5	1			
						10.7	0.2			
						12.5	0.9			
						13.2	0.8			
					Average	11.76666667	0.941666667			
					Standard Deviation	1.070542202	0.336987546			
1803		-54.2	-175.9	12.6		15	0.8			
			184.1			15.2	1		X	
						14	0.9			
						15.2	1.6			
						13.5	0.8			
						15	1.1			
						15.1	1.3			
						15	1.2			
						14.1	1			
						14.5	0.8			
						15	1.2			
						14.3	0.8			
					Average	14.65833333	1.041666667			
					Standard Deviation	0.563202423	0.250302847			
1804		-50.8	-174.7	12.8		12.4	0.8			
			186.3			13.4	0.8		X	
						13.1	0.9			
						13.9	0.5			
						1.5	0.7			
						1.5	0.7			
						12.3	0.7			
						12	0.5			
						13.1	1.2			
						12.5	0.5			
						11.2	0.6			

					10.6	0.7			
				Average	10.625	0.716666667			
				Standard Deviation	4.357882096	0.199240984			
1805	-58.6	-170.5	9.6		12.8	0.9			
		189.5			13.1	0.9			X
					13.7	1.6			
					12.3	0.9			
					11.2	0.7			
					11.9	1			
					11.8	0.7			
					13	0.7			
					12.9	1			
					13.2	0.8			
					13	0.9			
					12.3	1.2			
				Average	12.6	0.941666667			
				Standard Deviation	0.70967342	0.253908836			
1806	-58.2	-175.7	8.8		12.7	0.6			
		184.3			13.1	0.6			X
					14.5	1.2			
					13.1	0.6			
					12.4	0.9			
					11.5	0.4			
					12.1	0.7			
					12.8	0.8			
					13.4	0.6			
					13.8	0.5			
					13.6	0.8			
					11.2	0.6			
				Average	12.85	0.691666667			
				Standard Deviation	0.951075946	0.210878394			
1807	-61.5	-176.4	9.5		10.9	0.5			
		183.6			13	0.9			X

						11.4	0.9			
						12.7	1.1			
						10.5	0.4			
						9.9	0.5			
						8.9	0.4			
						9.2	0.3			
						11	0.5			
						11.4	0.6			
						11.4	0.5			
						11.5	0.7			
					Average	10.98333333	0.608333333			
					Standard Deviation	1.233497123	0.242930343			
1808		-64.6	-176.7	20.9		17.5	1.6			
			183.3			12.3	0.8			X
						12.9	0.9			
						14	2.2			
						13.8	8.7			
						9.9	0.5			
						7.9	0.3			
						11.6	1			
						11.2	0.7			
						10.3	0.5			
						13.5	0.9			
						14.3	0.9			
					Average	12.43333333	1.583333333			
					Standard Deviation	2.497028537	2.299341144			
1809		-60.1	-173.6	11.9		13.9	0.6			
			186.4			13.6	0.7			X
						11.5	0.5			
						11.3	0.6			
						11.6	0.5			
						9.2	0.4			
						12.1	0.7			
						14.3	0.7			

						13.9	0.6			
						13.6	0.6			
						13.2	0.7			
						13.1	0.5			
					Average	12.60833333	0.591666667			
					Standard Deviation	1.495118319	0.099620492			
1810		-61.7	-173.7	11.8		11.6	0.3			
			186.3			11.8	0.7		X	
						13.6	0.8			
						14.2	1.3			
						10.9	0.5			
						10.2	0.5			
						9.5	0.3			
						13.2	1.4			
						14.5	1.2			
						11.9	0.5			
						11.8	0.6			
						11.5	0.7			
					Average	12.05833333	0.733333333			
					Standard Deviation	1.544761431	0.374974747			
1811		-65.8	-168.2	14		12.4	0.7			
			191.8			14.1	1.2		X	
						11.8	0.7			
						10.3	0.4			
						13.9	1.4			
						14.8	1.8			
						12.1	0.6			
						13.7	1.2			
						14.3	1.7			
						13.7	1			
						12.3	1.1			
						13.4	0.8			
					Average	13.06666667	1.05			
					Standard Deviation	1.294276445	0.435889894			

1812		-62.6	-167.5	35.2		10.1	0.5			
			192.5			12.2	0.4		X	
						12.9	1.2			
						14.8	2			
						15.3	2			
						11	0.9			
						10.7	0.5			
						10.8	0.5			
						11.4	0.5			
						10.9	0.5			
						13.6	1.2			
						11.3	0.9			
				Average	12.08333333		0.925			
				Standard Deviation	1.701781598		0.575444492			
1813		-60.7	-167.4	16		12.3	0.8			
			192.6			11.8	1		X	
						12.8	0.7			
						13.8	1			
						13.1	1			
						12	0.6			
						14.4	1.3			
						14.4	1.1			
						13.1	1			
						12.4	0.6			
						13.1	1			
						12.7	0.8			
				Average	12.99166667		0.908333333			
				Standard Deviation	0.853291311		0.210878394			
1814		-61.3	-164.0	11		8.6	0.3			
			196.0			8.3	0.3		X	
						8.8	0.2			
						9.4	0.4			
						11.2	1			

						8.1	0.3			
						10.4	0.8			
						8.4	0.5			
						11	0.9			
						12.7	1			
						11.2	0.7			
						9.5	0.3			
					Average	9.8	0.558333333			
					Standard Deviation	1.474634007	0.302890119			
1815		-64.6	-166.3	7.2		14.2	2.2			
			193.7			14.2	0.9		X	
						9	0.5			
						6.5	0.6			
						6.6	0.4			
						8.5	0.4			
						10.4	0.5			
						13.1	2.1			
						13.8	1.9			
						13.7	1.7			
						14.5	2.5			
						14.2	2.1			
					Average	11.55833333	1.316666667			
					Standard Deviation	3.147714419	0.831027112			
1816		-59.3	-164.5	9.2		14.2	0.8			
			195.5			13.6	0.7		X	
						14.6	1.4			
						12.2	0.7			
						11.2	0.6			
						12.4	0.1			
						10.1	0.4			
						14.1	1.4			
						12.5	0.7			
						13.6	0.6			
						13.6	0.9			

						13.3	0.9			
					Average	12.95	0.766666667			
					Standard Deviation	1.322875656	0.36762959			
1817		-58.4	-163.3	11.4		13.8	1			
			196.7			12.6	0.7			X
						14.1	1			
						11.5	0.6			
						11	0.6			
						10.6	0.7			
						11.1	0.5			
						12.1	0.4			
						13.6	0.8			
						12.8	0.5			
						13	0.8			
						13.4	0.8			
					Average	12.46666667	0.7			
					Standard Deviation	1.190365363	0.190692518			
1818		-52.2	-169.3	8		13.1	1.1			
			190.7			11.7	0.8			X
						13.7	0.8			
						12.4	1.1			
						14.4	1.1			
						12.7	0.9			
						11.7	0.6			
						11.7	0.5			
						12.5	0.8			
						12.8	0.9			
						12.2	0.8			
						12.1	0.9			
					Average	12.58333333	0.858333333			
					Standard Deviation	0.833212112	0.188092498			
1819		-53.5	-167.1	19.4		13.1	1			
			192.9			13.5	1.5			X

						15.8	1.9			
						14.7	0.9			
						13.5	0.7			
						13	1.5			
						13.4	1.5			
						13.8	1.1			
						12.9	1.2			
						13.4	1.2			
						13.9	1.1			
						14.7	1.2			
					Average	13.80833333	1.233333333			
					Standard Deviation	0.856481527	0.322865954			
1820		-50.3	-162.5	9.1		12.1	1.1			
			197.5			10.9	1.2		X	
						13.3	2.1			
						11.6	1.2			
						12.6	1.5			
						12.4	1.7			
						12.6	2.6			
						12.3	1.1			
						11.5	0.8			
						13	1.3			
						12.2	1.1			
						13.1	1.8			
					Average	12.3	1.458333333			
					Standard Deviation	0.704530792	0.510718448			
1821		-46.9	-161.6	6.2		12.9	1.6		X	
			198.4			14.6	1.6			
						12.6	1.3			
						12.8	1.4			
						13.1	1.5			
						14.2	1.2			
						12.3	1.1			
						12.4	1.3			

						13.8	2			
						12.9	1.6			
						12.4	1.3			
						13.4	1.6			
					Average	13.11666667	1.458333333			
					Standard Deviation	0.743252476	0.242930343			
1822		-43.7	-164.9	9		15.2	1.8		X	
			195.1			14.6	2.1			
						13.8	1.9			
						14.8	2.9			
						13.3	1.7			
						12.9	1.9			
						13.8	2			
						14.1	1.4			
						15.1	2.1			
						15.4	2.6			
						14.3	2			
						14.5	1.8			
					Average	14.31666667	2.016666667			
					Standard Deviation	0.770871211	0.397339638			
1823		-41.6	-166.5	8		13.7	1.6		X	
			193.5			12.3	0.8			
						13.3	1.3			
						13	1.2			
						11.8	1			
						12.1	1.4			
						12.7	1.1			
						13.4	1.3			
						13.6	1.3			
						13.9	1.4			
						13.9	1.7			
						13.6	1.6			
					Average	13.10833333	1.308333333			
					Standard Deviation	0.724202801	0.260971379			

1824		-41.3	-160.4	7.5		13.7	1.4		X	
			199.6			13.8	1.3			
						12.1	0.9			
						12.7	1.1			
						11.7	1.1			
						11.4	1			
						12	0.7			
						11.7	0.9			
						12.5	1.2			
						13.9	1.2			
						14.7	1.6			
						13.1	1.2			
				Average		12.775	1.133333333			
				Standard Deviation		1.058407895	0.242462118			
1825		-44.1	-161.5	18		14.7	1.8		X	
			198.5			13.2	1.5			
						14	1.8			
						13.8	1.4			
						13.4	1.4			
						11.9	1.2			
						11.7	1.3			
						11.6	1.2			
						11.7	1.3			
						13.9	1.6			
						13.9	1.7			
						14	1.6			
				Average		13.15	1.483333333			
				Standard Deviation		1.113144604	0.216724934			
1826		-49.1	-169.9	15.8		16.1	1.7		X	
			190.1			16.2	1.6			
						16.2	2.2			
						16.7	3.3			
						15.8	1.4			

						12.2	0.9			
						12.3	1.6			
						13.9	1.3			
						12.3	1			
						13.5	1.3			
						13.1	1.3			
						15.3	1.5			
					Average	14.46666667	1.591666667			
					Standard Deviation	1.752573865	0.634548276			
1827		-38.3	-162.5	8		12.3	2		X	
			197.5			11.1	1.2			
						11.3	1.2			
						10.6	1			
						10	0.6			
						10.5	1			
						11.7	1.2			
						10.8	1.2			
						10.4	1.4			
						10.9	1.1			
						10.4	1			
						10.7	1.1			
					Average	10.89166667	1.166666667			
					Standard Deviation	0.633113997	0.325669474			
1828		-35.3	-164.7	8		12.3	1.6		X	
			195.3			11.9	1.4			
						10.7	1.3			
						10.4	1			
						10.4	1.1			
						9.7	0.8			
						9.9	0.8			
						9.9	1			
						11.1	1.8			
						11.4	1.8			
						11.6	1.8			

						11.4	1.3			
					Average	10.89166667	1.308333333			
					Standard Deviation	0.851157857	0.377692355			
1829		-32.5	-167.8	17.8		12.7	1.6		X	
			192.2			11	1.4			
						10.4	1.2			
						10.8	1.2			
						11.2	1.4			
						12.6	1.3			
						12.5	1.5			
						13.4	1.9			
						12.1	1.6			
						9.7	1.1			
						11.1	1.5			
						10.9	1.4			
					Average	11.53333333	1.425			
					Standard Deviation	1.103987264	0.217944947			
1830		-31.7	-161.7	13		10.6	1		X	
			198.3			12.1	1.2			
						10	0.8			
						9.6	0.8			
						9.1	0.6			
						9	0.8			
						8.2	0.7			
						8.6	0.6			
						9.7	0.9			
						10.5	1.2			
						9.5	1.1			
						10.3	1			
					Average	9.766666667	0.891666667			
					Standard Deviation	1.04301428	0.210878394			
1831		-32.2	-163.2	19.1		11.2	1.4		X	
			196.8			10.9	1.5			

						11.6	1.6			
						10.5	1.2			
						10.4	1			
						10.2	1.3			
						9.3	1.1			
						9.6	1			
						10.5	1.1			
						10.2	1			
						10.9	1.1			
						12	1.3			
					Average	10.60833333	1.216666667			
					Standard Deviation	0.772785203	0.203752672			
1832		-29.8	-165.0	20.2		11.1	1.4	X		
			195.0			11.2	1.2			
						10.8	0.9			
						11.2	1			
						11	1.3			
						10	1			
						10.5	1.2			
						11.2	1.2			
						10.6	1.1			
						10.8	1.3			
						11.3	1.2			
						11	1.2			
					Average	10.89166667	1.166666667			
					Standard Deviation	0.377692355	0.143548113			
1833		-28.6	-167.8	16.6		11.9	1.8	X		
			192.2			11.3	1.2			
						11.9	2.4			
						11.1	1.7			
						10.6	1.2			
						10.7	1.1			
						10.6	1			
						12.3	1.6			

						11.2	1.5			
						11.4	1			
						12.1	1.8			
						12.2	1.6			
					Average	11.44166667	1.491666667			
					Standard Deviation	0.627344089	0.414418176			
1834		-26.7	-163.6	19		10.1	1.2	X		
			196.4			10.4	1.4			
						8	0.8			
						9.5	1.1			
						8.6	1.3			
						9.8	1.1			
						10.7	1.3			
						9.5	1.1			
						10.8	1.5			
						8.5	0.7			
						9.4	1.1			
						8.1	0.9			
					Average	9.45	1.125			
					Standard Deviation	0.971877284	0.237888438			
1835		-22.7	-166.7	12		7.2	0.9	X		
			193.3			4.1	0.8			
						8.6	0.9			
						8.2	0.9			
						6.1	0.8			
						4.4	0.5			
						3.3	0.5			
						5.4	0.8			
						7.9	0.8			
						8.2	0.8			
						7.8	0.9			
						7.2	0.8			
					Average	6.533333333	0.783333333			
					Standard Deviation	1.823749052	0.140345893			

1836		-25.7	-169.2	31.7		11.1	1.2	X		
			190.8			12.4	1.1			
						9.6	0.7			
						9.1	1.1			
						8	1.1			
						9.9	1			
						10.4	1.3			
						10.1	1.4			
						10.2	1.6			
						10	1.1			
						9.3	1			
						12.5	1.6			
					Average	10.2166667	1.183333333			
					Standard Deviation	1.291111807	0.25878504			
1837		-17.8	-166.5	20.3		5.7	0.7	X		
			193.8			5.2	0.6			
						3.6	0.5			
						5.6	0.9			
						4.5	0.7			
						4	0.6			
						4.3	0.5			
						4.4	0.6			
						5.9	0.8			
						5.3	0.8			
						5	0.7			
						5.1	0.6			
					Average	4.883333333	0.666666667			
					Standard Deviation	0.719637956	0.123091491			
1838		-16.3	-163.7	22		5	0.8	X		
			196.3			5.4	0.9			
						5	0.7			
						4.9	0.6			
						3.8	0.5			

						4.7	0.7			
						2.9	0.6			
						4.6	0.4			
						2.4	0.5			
						4.1	0.5			
						3.1	0.6			
						4.6	0.7			
					Average	4.208333333	0.625			
					Standard Deviation	0.957704009	0.142222617			
1839		-19.2	-163.4	11		4.8	0.5	X		
			196.6			5.9	0.5			
						4.2	0.5			
						4.6	0.6			
						4	0.5			
						4.3	0.5			
						4.8	0.5			
						3.8	0.5			
						4.4	0.3			
						5.2	0.6			
						5.8	0.5			
						5.2	0.5			
					Average	4.75	0.5			
					Standard Deviation	0.670820393	0.073854895			
1840		-15.6	-168.5	12.5		4.8	0.5	X		
			191.5			4.1	0.5			
						4.8	0.5			
						6.2	0.3			
						2.8	0.5			
						3.7	0.5			
						3.3	0.6			
						4.6	0.6			
						5.4	0.6			
						6	0.5			
						4	0.7			

						4.6	0.5			
					Average	4.525	0.525			
					Standard Deviation	1.023474475	0.09653073			
1841		-11.4	-162.3	14.2		2.6	0.4	X		
			197.7			2.2	0.4			
						2.1	0.3			
						0.2	0.3			
						1.2	0.3			
						2	0.4			
						2.2	0.3			
						2.3	0.3			
						1.8	0.4			
						2.8	0.4			
						2.2	0.3			
						1.9	0.3			
					Average	1.958333333	0.341666667			
					Standard Deviation	0.68285275	0.051492865			
1842		-8.9	-163.1	15.8		2.7	0.3	X		
			196.9			1.8	0.3			
						1.3	0.4			
						2.1	0.3			
						2.7	0.4			
						1.5	0.3			
						1.7	0.3			
						2	0.3			
						2.2	0.3			
						1.4	0.3			
						2	0.3			
						3	0.4			
					Average	2.033333333	0.325			
					Standard Deviation	0.543278488	0.045226702			
1843		-1.1	-163.9	18.9		3.4	0.5	X		
			196.1			3.3	0.4			

						3.1	0.5			
						2.8	0.5			
						1.5	0.5			
						2.8	0.4			
						2.2	0.4			
						1.7	0.5			
						2.3	0.5			
						2.6	0.5			
						2.2	0.5			
						2.8	0.4			
					Average	2.558333333	0.466666667			
					Standard Deviation	0.596136551	0.049236596			
1844		-5.1	-167.6	5.5		1.5	0.3	X		
			192.4			1.6	0.3			
						0.3	0.3			
						0.6	0.3			
						2	0.3			
						1.2	0.3			
						2.2	0.2			
						2.4	0.3			
						1.1	0.4			
						1.4	0.3			
						3.3	0.4			
						1.6	0.4			
					Average	1.6	0.316666667			
					Standard Deviation	0.809039835	0.057735027			
1845		-7.0	-169.8	17.5		2.7	0.6	X		
			190.2			2.9	0.6			
						3.8	0.8			
						3.2	0.6			
						3.6	0.7			
						3	0.6			
						2.4	0.5			
						3.1	0.5			

						3.5	0.5			
						3.1	0.6			
						3	0.5			
						2.5	0.5			
					Average	3.066666667	0.583333333			
					Standard Deviation	0.422833157	0.093743687			
1846		-5.1	-161.1	12.2		2.4	0.5	X		
			198.9			2.6	0.5			
						2.2	0.5			
						1.9	0.6			
						0.7	0.5			
						1.3	0.4			
						2.3	0.4			
						2.1	0.5			
						2.3	0.4			
						2.1	0.4			
						3	0.5			
						2.6	0.5			
					Average	2.125	0.475			
					Standard Deviation	0.61218684	0.062158156			
1847	Korolev "T"	-4.4	-157.8	22.1		4.6	0.6	X		
			202.2			3.5	0.6			
						3.3	0.4			
						3.8	0.5			
						2.7	0.5			
						3.7	0.6			
						3.9	0.6			
						4.2	0.5			
						3.8	0.6			
						4.2	0.5			
						4.2	0.4			
						4.3	0.5			
					Average	3.85	0.525			
					Standard Deviation	0.514339824	0.075377836			

1848		-0.7	-158.5	19		1.6	0.3	X		
			201.5			2.1	0.4			
						2.4	0.5			
						2	0.4			
						3	0.4			
						3.3	0.4			
						2.8	0.4			
						2.9	0.3			
						3.5	0.3			
						3.2	0.4			
						2.5	0.3			
						2.2	0.4			
					Average	2.625	0.375			
					Standard Deviation	0.584846522	0.062158156			
1849		-9.9	-159.4	15.9		3.3	0.3	X		
			200.6			3	0.4			
						2.8	0.3			
						2.2	0.3			
						3.1	0.4			
						3.1	0.3			
						2.2	0.4			
						2.1	0.4			
						3.3	0.4			
						4.4	0.4			
						2	0.4			
						3.6	0.5			
					Average	2.925	0.375			
					Standard Deviation	0.688395881	0.051639778			
1850		-0.2	-158.7	31.1		1.4	0.3	X		
			207.3			1.8	0.4			
						1.8	0.6			
						2.3	0.3			
						1.8	0.4			

						2.4	0.5			
						4.8	0.4			
						1.4	0.3			
						1.2	0.3			
						1.1	0.3			
						1.8	0.2			
						0.6	0.3			
					Average	1.866666667	0.358333333			
					Standard Deviation	1.05169416	0.108362467			
1851		-7.7	-150.3	9.2		2.8	0.4	X		
			209.7			3.2	0.3			
						3.5	0.4			
						3.7	0.4			
						3.4	0.4			
						2.9	0.5			
						2.1	0.4			
						2.4	0.4			
						2	0.4			
						3	0.4			
						3.1	0.4			
						3.4	0.5			
					Average	2.958333333	0.408333333			
					Standard Deviation	0.548482756	0.051492865			
1852		-11.3	-156.6	11.5		3.8	0.4	X		
			203.4			3.5	0.4			
						3.2	0.4			
						3	0.4			
						1.9	0.4			
						3.7	0.4			
						2.6	0.5			
						2.9	0.5			
						3.5	0.4			
						3	0.4			
						2.7	0.8			

					3.7	0.4			
				Average	3.125	0.45			
				Standard Deviation	0.559423404	0.111803399			
1853	-15.1	-150.7	16.2		4.5	0.7	X		
		209.3			4.2	0.6			
					4.3	0.6			
					4.9	0.8			
					3.2	0.8			
					3.2	0.6			
					3.6	0.6			
					3.5	0.5			
					3.4	0.7			
					2.8	0.6			
					3.2	0.5			
					5.4	0.7			
				Average	3.85	0.641666667			
				Standard Deviation	0.798293635	0.099620492			
1854	-18.9	-152.9	35.5		4.9	0.7	X		
		207.1			2.7	0.4			
					4	0.5			
					3.4	0.4			
					2.9	0.4			
					3.5	0.3			
					3.8	0.4			
					2.9	0.4			
					2.7	0.4			
					3.4	0.4			
					4.1	0.5			
					7	0.5			
				Average	3.775	0.441666667			
				Standard Deviation	1.206893081	0.099620492			
1855	-14.8	-156.1	11.2		3.9	0.6	X		
		203.9			4	0.7			

						4.6	0.7			
						3.5	0.5			
						3.8	0.6			
						3.8	0.4			
						4.3	0.4			
						4.8	0.8			
						3.8	0.8			
						3.9	0.6			
						4.2	0.6			
						4.9	0.5			
					Average	4.125	0.6			
					Standard Deviation	0.441330633	0.134839972			
1856		-17.5	-157.3	24.8		4.1	0.5	X		
			202.7			4.4	0.6			
						3.3	0.6			
						4.7	0.6			
						3.7	0.6			
						3.3	0.6			
						4	0.5			
						4.1	0.5			
						5.1	0.2			
						5.1	0.6			
						5	0.6			
						4.4	0.5			
					Average	4.266666667	0.533333333			
					Standard Deviation	0.637228849	0.115470054			
1857		-21.6	-157.4	13		4.3	0.6	X		
			202.6			5.6	0.6			
						6.3	0.6			
						6.1	0.6			
						5.6	0.6			
						4	0.5			
						3.9	0.4			
						4.5	0.6			

						5.8	0.5			
						4.8	0.5			
						4.6	0.6			
						5	0.6			
					Average	5.041666667	0.558333333			
					Standard Deviation	0.819598941	0.066855792			
1858		-26.2	-157.4	20.5		10.1	1.1	X		
			202.6			8.8	1.2			
						8.1	1.1			
						9.2	1.8			
						7.8	1			
						8.1	1.2			
						8	1.2			
						9.2	1.2			
						8.6	1.4			
						9.7	0.9			
						9.5	1			
						10.7	1.1			
					Average	8.983333333	1.183333333			
					Standard Deviation	0.913368723	0.232900031			
1859		-25.2	-150.3	22.6		8.1	1	X		
			209.7			7.4	0.8			
						10.3	1			
						8.8	0.7			
						7.9	0.8			
						6.9	0.8			
						5.6	0.8			
						8.9	1			
						7.9	0.8			
						8.2	1.2			
						9.7	0.8			
						9.1	1.3			
					Average	8.233333333	0.916666667			
					Standard Deviation	1.26443184	0.185047087			

1860		-23.0	-152.2	14.1		8.6	1	X		
			207.8			8.4	0.8			
						8.9	0.8			
						7.7	0.9			
						6.6	0.8			
						7.4	0.8			
						7.2	0.6			
						6.5	0.7			
						6.8	0.6			
						6.5	0.7			
						9	0.7			
						8.4	0.7			
					Average	7.66666667	0.75833333			
					Standard Deviation	0.96042919	0.11645001			
1861		-24.9	-153.6	22		8	0.9	X		
			206.4			8	0.8			
						8.9	1.3			
						9.3	1.2			
						8	1			
						7.7	1.2			
						8.5	1			
						8.5	0.9			
						8.5	0.9			
						8.3	0.7			
						8.1	0.8			
						7.3	0.8			
					Average	8.25833333	0.95833333			
					Standard Deviation	0.53335700	0.18809249			
1862		-31.3	-154.1	12		7.2	0.7		X	
			205.9			7.5	0.6			
						8.1	0.5			
						7	0.5			
						5.2	0.5			

						6.9	0.5			
						6.1	0.5			
						5	0.6			
						5.8	0.4			
						5.1	0.5			
						4.9	0.7			
						6.9	0.6			
					Average	6.308333333	0.55			
					Standard Deviation	1.099138781	0.090453403			
1863		-32.1	-152.2	13.6		10.1	0.5		X	
			207.8			7.3	0.7			
						8.1	0.7			
						7.4	0.5			
						7.3	0.4			
						7.4	0.6			
						7.2	0.5			
						8.5	0.6			
						8.2	0.7			
						9.7	0.7			
						10.1	0.5			
						9.6	0.5			
					Average	8.408333333	0.575			
					Standard Deviation	1.164207365	0.105528971			
1864		-36.1	-157.4	12		9.9	1.3		X	
			202.6			8.8	0.7			
						7.9	0.5			
						5.8	0.4			
						6.4	0.5			
						6.6	0.4			
						6.5	0.4			
						7.3	0.4			
						7.9	0.6			
						8.1	0.7			
						7.3	0.6			

						8.9	0.6			
					Average	7.616666667	0.591666667			
					Standard Deviation	1.202900535	0.250302847			
1865		-38.1	-151.4	28		12.4	1.3		X	
			208.6			12.6	1.4			
						11.9	1.2			
						12.1	1.5			
						11.2	1.7			
						11.6	1.1			
						11.1	1.5			
						10.4	1.7			
						11.1	2.4			
						12.7	1.5			
						12.6	1.6			
						13	1.3			
					Average	11.89166667	1.516666667			
					Standard Deviation	0.810676859	0.335297245			
1866		-40.2	-157.5	20.1		9.8	1.1		X	
			202.5			11.9	1.2			
						9.6	1.1			
						9	0.8			
						5	0.3			
						4.9	0.5			
						6.2	0.8			
						7.2	0.5			
						8	0.5			
						7.6	0.5			
						7.1	0.6			
						9.8	0.7			
					Average	8.008333333	0.716666667			
					Standard Deviation	2.104306551	0.288675135			
1867		-44.4	-157.0	18.2		14.7	1.4		X	
			203.0			13.4	2.1			

						14.5	1.5			
						14.1	2			
						13.6	1.6			
						13	2			
						12.9	1.8			
						13.4	2			
						14.2	1.9			
						15.5	2.3			
						15.6	2.2			
						14.5	1.7			
					Average	14.11666667	1.875			
					Standard Deviation	0.89324061	0.280016233			
1868		-44.1	-153.7	10.9		12.3	1		X	
			206.3			12.8	1.3			
						11.5	0.9			
						10.6	1			
						12.6	1.4			
						11.5	1			
						9.9	0.9			
						11.6	1.1			
						12.1	1.5			
						12.2	1.5			
						12.1	0.8			
						14.4	2			
					Average	11.96666667	1.2			
					Standard Deviation	1.125193586	0.349024615			
1869		-46.3	-155.9	7.8		14.9	2.3		X	
			204.1			15.6	2.4			
						15.2	2.5			
						15.8	4			
						15.4	3.2			
						16.8	3.3			
						13.9	3			
						14.3	2.4			

						13.9	2			
						13.8	1.7			
						13.8	1.9			
						14.7	2.4			
					Average	14.84166667	2.591666667			
					Standard Deviation	0.954852043	0.66395281			
1870		-49.0	-159.7	22.4		13	1.4		X	
			200.3			14.6	1.6			
						13.1	1.7			
						12.4	1.7			
						12.9	1.3			
						11.4	1.1			
						12.4	1.5			
						15	2.2			
						13.1	1			
						13.4	1.4			
						13	1.1			
						14.1	1.9			
					Average	13.2	1.491666667			
					Standard Deviation	0.989030747	0.352802632			
1871		-48.7	-153.4	9.6		12.8	1.4		X	
			206.6			14.5	1.8			
						13.4	1.5			
						11.6	1.7			
						11.5	1.3			
						10.9	1.9			
						9.7	1.1			
						9.8	1			
						12.4	1.6			
						12.9	1.4			
						14.6	2.1			
						13.7	1.7			
					Average	12.31666667	1.541666667			
					Standard Deviation	1.651904319	0.323217724			

1872		-50.4	-156.4	19.8		14.7	1.5			
			203.6			12.3	1			X
						12.3	1.3			
						12.9	1.2			
						11.6	1			
						11.2	0.9			
						11.7	1.1			
						14.6	1.6			
						13	0.6			
						13.9	1.4			
						12.4	1.8			
						12.3	1.2			
					Average	12.74166667	1.216666667			
					Standard Deviation	1.135748318	0.329830076			
1873		-53.5	-155.8	7.3		12.7	1			
			204.2			14.7	2			X
						13.1	1.8			
						12.5	0.9			
						11.1	0.8			
						9.5	0.9			
						11	1.1			
						11.8	1			
						12.5	1.1			
						14.3	2			
						15.4	2			
						10.4	1.2			
					Average	12.41666667	1.316666667			
					Standard Deviation	1.781640375	0.482103975			
1874		-54.0	-159.0	12.5		16.1	1.5			
			201.0			14.3	1.4			X
						15.8	1.9			
						15.5	1.9			
						13.3	1.1			

						13.5	1			
						12.8	1.2			
						13.4	1			
						14.8	1.7			
						14.4	1.2			
						14.2	1.1			
						13	1.1			
					Average	14.25833333	1.341666667			
					Standard Deviation	1.110657736	0.334278962			
1875		-59.1	-157.1	9		13.7	1			
			202.9			13.4	0.8		X	
						12.4	0.9			
						12.1	0.5			
						12.6	1			
						13.5	1.3			
						13.1	1.8			
						12.3	1			
						11.2	0.4			
						13.2	0.9			
						12.2	0.9			
						13.1	0.8			
					Average	12.73333333	0.941666667			
					Standard Deviation	0.726552674	0.35791907			
1876		-58.6	-152.7	9		14	0.9			
			207.3			12	0.7		X	
						12.7	0.7			
						12.6	0.6			
						12.6	1			
						11.1	0.6			
						10.9	0.6			
						13.2	0.7			
						13.6	1			
						11.5	0.8			
						12.4	0.7			

					15.2	1.3			
				Average	12.65	0.8			
				Standard Deviation	1.236196513	0.213200716			
1877	-60.9	-157.9	13		11.2	0.4			
		202.1			12.3	0.7			X
					13.3	0.8			
					12.3	0.7			
					11.8	0.6			
					11.6	0.9			
					11.5	0.7			
					12.6	0.8			
					12.7	0.8			
					13.3	0.8			
					11.6	0.8			
					10	0.3			
				Average	12.01666667	0.691666667			
				Standard Deviation	0.93695186	0.178164037			
1878	-62.0	-154.6	8		14.4	0.9			
		205.4			14.8	0.9			X
					14.9	1.5			
					14.3	1.5			
					14.1	1.2			
					10.9	0.4			
					10.9	0.5			
					10.7	0.6			
					11.1	0.3			
					10.9	0.4			
					11.5	0.3			
					13.2	0.9			
				Average	12.64166667	0.783333333			
				Standard Deviation	1.773265264	0.438661877			
1879	-64.3	-152.1	10.1		12.1	0.5			
		207.9			10.3	0.3			X

						11.4	0.5			
						9.9	0.4			
						12.9	1			
						11.7	0.7			
						13.3	0.8			
						9.5	0.3			
						11.4	0.6			
						13.7	0.9			
						14	1.2			
						11.7	0.4			
					Average	11.825	0.633333333			
					Standard Deviation	1.461086146	0.290245455			
1880		-63.0	-157.1	10.5		12.8	0.3			
			202.9			14.9	3.2		X	
						12.9	0.7			
						11.3	0.5			
						11.1	0.3			
						12.4	0.6			
						11.1	0.2			
						13.6	1			
						10.8	0.5			
						10.3	0.4			
						14.4	1.2			
						12.8	0.4			
					Average	12.36666667	0.775			
					Standard Deviation	1.47113644	0.818118684			
1881		-65.9	-154.0	22		14.3	1.2			
			206.0			10.7	0.3		X	
						16.1	2.3			
						12.5	0.5			
						10.5	0.4			
						8.6	0.4			
						7	0.2			
						10.7	0.6			

						9.1	0.3			
						13.5	0.8			
						11	0.3			
						13	0.8			
					Average	11.41666667	0.675			
					Standard Deviation	2.578171774	0.586398871			
1882		-69.0	-148.5	9.5		8.8	0.2			
			211.5			8.9	0.3		X	
						11.3	0.6			
						10.5	0.4			
						6.9	0.1			
						7.7	0.2			
						7	0.2			
						8.3	0.2			
						6.9	0.1			
						5.8	0.1			
						4.3	0.1			
						7.2	0.1			
					Average	7.8	0.216666667			
					Standard Deviation	1.927787238	0.152752523			
1883		-65.8	-147.7	9.5		11.3	0.5			
			212.3			10.8	0.3		X	
						11.6	0.4			
						9.7	0.3			
						7.4	0.2			
						9.1	0.2			
						8.2	0.1			
						8.2	0.2			
						10.3	0.2			
						11.8	0.3			
						11.2	0.3			
						9.5	0.2			
					Average	9.925	0.266666667			
					Standard Deviation	1.476559268	0.107308674			

1884		-60.8	-145.5	9.4		14.3	2.3			
			214.5			14.1	1.4			X
						8.5	0.3			
						10.6	0.5			
						9.3	0.5			
						10	0.4			
						11.6	0.7			
						12.9	0.9			
						13.6	1			
						12.9	1.2			
						13.1	0.7			
						13.6	1			
					Average	12.04166667	0.908333333			
					Standard Deviation	1.983778916	0.550137724			
1885		-62.7	-145.7	5.8		13.2	1			
			214.3			12.8	0.5			X
						10.9	0.3			
						11	0.3			
						10.1	0.3			
						10.2	0.3			
						10.3	0.5			
						11	0.6			
						11.5	0.7			
						13.5	1.5			
						12.8	1			
						12.9	0.7			
					Average	11.68333333	0.641666667			
					Standard Deviation	1.271243724	0.370401093			
1886		-60.4	-143.0	14.1		13.1	0.8			
			217.0			9.8	0.3			X
						10.4	0.5			
						10.2	0.3			
						9.1	0.4			

						9.9	0.4			
						11.8	0.4			
						16.6	2.7			
						10.3	0.5			
						10.4	0.5			
						11.2	0.6			
						10	0.4			
					Average	11.06666667	0.65			
					Standard Deviation	2.033954202	0.659889798			
1887		-57.8	-148.8	12		10	0.3			
			211.2			11.6	0.5		X	
						14.5	1.9			
						14.9	1.9			
						11.6	0.7			
						11.5	0.7			
						11.8	0.8			
						10.3	0.8			
						14.4	1.4			
						13	0.8			
						13.47	0.9			
						10.3	0.3			
					Average	12.28083333	0.916666667			
					Standard Deviation	1.732693428	0.542441171			
1888		-56.3	-146.3	13.1		15.3	1.2			
			213.7			15.2	1.2		X	
						15.8	1.1			
						14.1	1.3			
						12.3	2			
						10.9	0.7			
						10.8	0.9			
						10.3	1.1			
						10.5	0.6			
						12	0.1			
						13.5	0.9			

						16.3	1.9			
					Average	13.08333333	1.083333333			
					Standard Deviation	2.226221149	0.521942758			
1889		-51.4	-148.1	17.5		15.7	1.5			
			211.9			16.1	1.8		X	
						14.8	0.9			
						14.4	1.4			
						14.1	1.3			
						11.4	1.1			
						10.9	1.1			
						11.8	1.2			
						13.7	1			
						12.2	0.8			
						12.4	0.9			
						16.4	1.7			
					Average	13.65833333	1.225			
					Standard Deviation	1.896627789	0.322278818			
1890		-58.4	-142.3	11.5		11.9	0.9			
			217.7			12	0.7		X	
						9.6	0.5			
						12.3	0.8			
						12.5	1			
						10	0.4			
						15.1	1.3			
						11	0.7			
						10.5	0.5			
						12.3	0.6			
						13.2	1.1			
						12.3	1.2			
					Average	11.89166667	0.808333333			
					Standard Deviation	1.490855967	0.293747985			
1891		-48.7	-142.3	11		13.6	1.1	X		
			217.7			14.4	1.2			

						12.7	0.8			
						11.7	0.7			
						12.6	1			
						12	0.7			
						11.9	0.7			
						13.5	1.2			
						12.7	0.9			
						14.3	1			
						14.4	1.1			
						13.7	0.9			
					Average	13.125	0.941666667			
					Standard Deviation	0.989145637	0.188092498			
1892		-44.3	-143.7	6.9		12.3	0.8	X		
			216.3			10.3	0.9			
						10	0.9			
						9.7	0.7			
						9.2	0.4			
						8.4	0.6			
						9	0.4			
						10.4	0.5			
						10.2	0.4			
						10.8	1			
						11.6	1			
						12.1	1			
					Average	10.33333333	0.716666667			
					Standard Deviation	1.211560476	0.248022482			
1893		-40.8	-143.3	7.5		11.2	1.2	X		
			216.7			10.4	1.1			
						9.4	1.2			
						11.5	1.21			
						10.8	1			
						6.9	0.6			
						7.6	0.7			
						7.5	0.7			

						5.6	0.7			
						10.5	1.1			
						12.8	1.4			
						11.1	1.3			
					Average	9.608333333	1.0175			
					Standard Deviation	2.201015606	0.27310088			
1894		-42.0	-140.8	8.3		11.4	1	X		
			219.2			10.3	0.9			
						6.8	0.4			
						7.9	0.7			
						8.4	0.8			
						9.1	0.7			
						8.9	0.7			
						8.5	0.7			
						6.7	0.7			
						11.5	0.8			
						11.3	1.2			
						10.9	0.7			
					Average	9.308333333	0.775			
					Standard Deviation	1.74327713	0.195982374			
1895		-43.7	-147.8	17.3		10	1	X		
			212.2			10.1	0.9			
						10.6	0.9			
						12.2	1.1			
						9.8	1			
						10.1	1			
						9.5	1.2			
						10.1	1.1			
						9.5	0.8			
						9.4	0.9			
						9.8	0.9			
						9.7	0.7			
					Average	10.06666667	0.958333333			
					Standard Deviation	0.751160718	0.137895437			

1896		-36.0	-145.0	13		8.8	0.8	X		
			215.0			11.3	1.1			
						7.8	0.8			
						6.7	1			
						7.1	0.8			
						5.9	0.7			
						4.5	0.7			
						7.1	0.6			
						7.4	0.8			
						8.3	0.7			
						7.7	0.7			
						8	0.6			
				Average		7.55	0.775			
				Standard Deviation		1.641783952	0.148477118			
1897		-33.7	-146.5	10		7	0.6	X		
			213.5			7.2	0.7			
						7.5	0.7			
						7.8	0.6			
						7.9	0.8			
						8.1	0.7			
						8.3	0.6			
						6.5	0.6			
						7.5	0.6			
						7.1	0.7			
						7	0.6			
						7.4	0.6			
				Average		7.441666667	0.65			
				Standard Deviation		0.519542339	0.067419986			
1898		-33.8	-149.8	18.5		10.6	1	X		
			210.2			11	0.9			
						10.3	1.1			
						9.2	0.9			
						9.2	0.8			

						8.4	0.9			
						9.3	0.9			
						9.7	0.8			
						10.9	0.9			
						11.5	1			
						11.3	0.8			
						10.6	0.1			
					Average	10.16666667	0.841666667			
					Standard Deviation	0.983808309	0.250302847			
1899		-37.8	-141.7	16.5		10.4	0.9	X		
			218.3			9.4	0.9			
						8.9	0.7			
						8.6	0.9			
						7.9	0.7			
						8.4	0.8			
						7.5	0.5			
						8.6	0.6			
						9.2	0.9			
						10	0.9			
						10.6	0.9			
						10.2	0.9			
					Average	9.141666667	0.8			
					Standard Deviation	1.003139013	0.141421356			
1900		-30.5	-147.3	11.2		11	0.9	X		
			212.7			10	0.9			
						10.4	0.9			
						11.3	1			
						8.7	0.7			
						8.3	0.9			
						8.6	0.8			
						10.5	1			
						10.3	1.7			
						11.2	1.3			
						9.9	0.9			

					10.4	1.2			
				Average	10.05	1.016666667			
				Standard Deviation	1.013993007	0.269117525			
1901	-30.2	-144.6	14.3		11	0.8	X		
		215.4			10	1.1			
					6.7	0.9			
					7	0.8			
					6.8	0.7			
					7.6	0.7			
					8.2	0.8			
					7.8	0.7			
					7.8	0.9			
					9	1.1			
					8.2	0.7			
					8.8	0.7			
				Average	8.241666667	0.825			
				Standard Deviation	1.292958787	0.148477118			
1902	-25.1	-145.0	16.5		7.7	0.6	X		
		215.0			7.3	0.8			
					7.7	0.8			
					6.4	0.6			
					7.1	0.7			
					7.3	0.8			
					6.8	0.6			
					7.3	0.9			
					7.4	0.8			
					7.3	0.7			
					7.8	0.6			
					6.3	0.8			
				Average	7.2	0.725			
				Standard Deviation	0.482418151	0.105528971			
1903	-23.1	-145.7	22		6.5	1	X		
		214.3			7	0.9			

						10.1	1			
						7.2	0.6			
						5.9	0.5			
						5.2	0.7			
						4.8	0.6			
						5.6	0.8			
						6.2	0.8			
						6.3	0.7			
						6.1	0.7			
						6.7	0.7			
					Average	6.46666667	0.75			
					Standard Deviation	1.340510984	0.15666989			
1904		-24.7	-140.2	18.9		6.3	0.7	X		
			219.8			5	0.5			
						6.3	0.6			
						5	0.6			
						6.2	0.7			
						7.9	0.8			
						5.5	0.6			
						7.8	0.8			
						7	0.8			
						6.7	0.8			
						6.9	0.9			
						7.1	0.8			
					Average	6.475	0.71666667			
					Standard Deviation	0.959284771	0.119341628			
1905		-21.3	-146.6	13.9		8	0.8	X		
			213.4			6.9	0.6			
						6.5	0.7			
						6.2	0.7			
						4.4	0.6			
						4.3	0.5			
						5.3	0.7			
						5.1	0.4			

						7.9	0.7			
						7.3	0.8			
						8	0.8			
						7.1	0.8			
					Average	6.416666667	0.675			
					Standard Deviation	1.357694124	0.128805703			
1906		-19.0	-145.5	26.7		3.7	0.5	X		
			214.5			4.9	0.4			
						5	0.7			
						4.9	0.6			
						5.3	0.7			
						4.1	0.5			
						4.1	0.4			
						2.3	0.6			
						4.6	0.6			
						4	0.7			
						5.4	0.7			
						4.5	0.7			
					Average	4.4	0.591666667			
					Standard Deviation	0.850668187	0.116450015			
1907		-14.7	-148.3	13.6		3.9	0.5	X		
			211.7			3.4	0.5			
						4.2	0.5			
						4	0.6			
						3.8	0.6			
						3.9	0.5			
						3.2	0.4			
						3.4	0.6			
						3.8	0.5			
						3.3	0.5			
						3.6	0.4			
						5.5	0.3			
					Average	3.833333333	0.491666667			
					Standard Deviation	0.608027113	0.090033664			

1908		-16.3	-143.4	12.7		3.8	0.5	X		
			216.6			5.6	0.7			
						4.8	0.5			
						4.2	0.5			
						4.3	0.5			
						4.7	0.5			
						4.2	0.6			
						4.9	0.7			
						4.8	0.5			
						3.4	0.5			
						3.3	0.5			
						3.4	0.5			
					Average	4.283333333	0.541666667			
					Standard Deviation	0.713293683	0.079296146			
1909		-13.8	-146.4	15		3.4	0.6	X		
			213.6			4.4	0.5			
						3.8	0.5			
						3.6	0.4			
						3.6	0.5			
						2.4	0.6			
						3.4	0.5			
						2.9	0.5			
						4.2	0.5			
						3.6	0.6			
						4	0.6			
						3.8	0.5			
					Average	3.591666667	0.525			
					Standard Deviation	0.543487615	0.062158156			
1910		-11.7	-146.6	16.9		4.4	0.5	X		
			213.4			3.8	0.5			
						3.1	0.5			
						2.3	0.5			
						3.5	0.5			

						3.3	0.5			
						2.6	0.5			
						3	0.4			
						3.3	0.4			
						3.9	0.4			
						4	0.5			
						4.1	0.6			
					Average	3.441666667	0.483333333			
					Standard Deviation	0.630235646	0.057735027			
1911		-9.1	-146.5	11.5		3.9	0.5	X		
			213.5			3.2	0.4			
						2.9	0.5			
						2.4	0.4			
						2.4	0.5			
						2	0.5			
						3.2	0.4			
						3.3	0.5			
						3.7	0.5			
						3.4	0.6			
						3.3	0.6			
					Average	3.063636364	0.490909091			
					Standard Deviation	0.583562725	0.070064905			
1912		-10.5	-141.0	21		3.7	0.4	X		
			219.0			4.9	0.5			
						3.1	0.6			
						2.5	0.5			
						2.4	0.5			
						3.6	0.4			
						4.1	0.4			
						1.7	0.5			
						3.5	0.4			
						3.1	0.4			
						3.5	0.5			
						2.9	0.5			

				Average	3.25	0.466666667			
				Standard Deviation	0.83937206	0.065133895			
1913	-5.4	-141.5	19.7		3	0.3	X		
		218.5			3.6	0.5			
					3.9	0.5			
					2.5	0.5			
					2.8	0.5			
					2.3	0.6			
					1.8	0.5			
					1.3	0.4			
					2.2	0.3			
					0.2	0.4			
					1.8	0.5			
					2.5	0.4			
				Average	2.325	0.45			
				Standard Deviation	0.999204229	0.090453403			
1914	-3.5	-146.0	16.3		2.9	0.4	X		
		214.0			3.1	0.5			
					2.3	0.3			
					2.9	0.4			
					2.1	0.5			
					3.4	0.5			
					3.8	0.5			
					3.2	0.4			
					3.2	0.5			
					2.7	0.5			
					3.21	0.5			
					1.7	0.5			
				Average	2.875833333	0.458333333			
				Standard Deviation	0.591538185	0.066855792			
1915	-4.5	-148.4	15.1		3.1	0.5	X		
		211.6			2.6	0.3			
					3	0.4			

						2.7	0.5			
						4.2	0.4			
						1.8	0.5			
						3.7	0.4			
						3.1	0.4			
						3.7	0.5			
						3.5	0.5			
						3.7	0.4			
						3.1	0.4			
					Average	3.183333333	0.433333333			
					Standard Deviation	0.637941766	0.065133895			
1916		-2.1	-134.7	16.5		3.5	0.2	X		
			225.3			2.2	0.3			
						1.9	0.2			
						1.9	0.3			
						3.9	0.3			
						2.7	0.3			
						3.1	0.3			
						1.7	0.3			
						3.1	0.4			
						2.7	0.5			
						3	0.3			
						1.7	0.3			
					Average	2.616666667	0.308333333			
					Standard Deviation	0.734640708	0.079296146			
1917		-3.8	-133.8	18.2		2	0.4	X		
			226.2			2.7	0.5			
						2.2	0.3			
						2.2	0.4			
						2.7	0.4			
						2.4	0.3			
						2.8	0.4			
						1.9	0.4			
						0.2	0.3			

1920		-10.9	-137.5	19.3		3.9	0.6	X		
			222.5			2.7	0.6			
						2.9	0.6			
						4.1	0.6			
						2.8	0.6			
						2.5	0.4			
						3.1	0.5			
						3.4	0.6			
						3.3	0.5			
						3.6	0.6			
						4	0.6			
						2.6	0.5			
				Average		3.241666667	0.558333333			
				Standard Deviation		0.563202423	0.066855792			
1921		-11.4	-134.0	11		4.4	0.6	X		
			226.0			3.6	0.7			
						4.6	0.6			
						2.3	0.5			
						3.8	0.6			
						3.3	0.7			
						2.1	0.6			
						3.8	0.6			
						3.7	0.7			
						4	0.6			
						3	0.7			
						2.9	0.6			
				Average		3.458333333	0.625			
				Standard Deviation		0.770428846	0.062158156			
1922		-14.7	-133.5	15.4		3.6	0.6	X		
			226.5			4.2	0.6			
						4.1	0.6			
						3.5	0.5			
						3.4	0.6			
						4.2	0.5			

						1.9	0.6			
						3	0.6			
						2.4	0.6			
						4.1	0.5			
						3.2	0.6			
						4.9	0.8			
					Average	3.541666667	0.591666667			
					Standard Deviation	0.840409352	0.079296146			
1923		-19.4	-136.8	11.7		4.5	0.7	X		
			223.2			4.7	0.8			
						5.2	0.7			
						3.7	0.7			
						3.8	0.5			
						3.3	0.6			
						2.5	0.2			
						2.5	0.5			
						2.6	0.4			
						3.7	0.6			
						2.7	0.5			
						4.8	0.6			
					Average	3.666666667	0.566666667			
					Standard Deviation	0.969848473	0.161432977			
1924		-19.8	-131.7	21.5		5.8	0.5	X		
			228.3			3.2	0.6			
						4.1	0.7			
						3.6	0.5			
						3.5	0.4			
						3.6	0.5			
						2.5	0.3			
						6.3	0.6			
						3.3	0.4			
						4.5	0.4			
						3.6	0.7			
						3.9	0.5			

				Average	3.991666667	0.508333333			
				Standard Deviation	1.083310023	0.124011241			
1925	-21.8	-135.0	10		6.5	0.7	X		
		225.0			4.8	0.4			
					3.6	0.8			
					4.2	0.5			
					3.8	0.7			
					2.6	0.6			
					5.6	0.6			
					5	0.7			
					3.3	0.6			
					2.9	0.6			
					5.2	0.7			
					3.2	0.7			
				Average	4.225	0.633333333			
				Standard Deviation	1.199336938	0.107308674			
1926	-24.2	-135.9	19		8.8	0.9	X		
					8.4	1.1			
					6.9	0.5			
					5.7	0.7			
					5.7	0.5			
					5	0.8			
					6.2	0.9			
					6.1	0.7			
					5.2	0.6			
					7.6	1			
					7.8	1			
					7.9	0.8			
				Average	6.775	0.791666667			
				Standard Deviation	1.296235809	0.197522534			
1927	-26.9	-137.0	37.5		5.3	0.4	X		
		223.0			5.7	0.4			
					6.1	0.5			

						6.4	0.3			
						6.1	0.6			
						5.8	0.7			
						3.1	0.3			
						2.9	0.3			
						3.4	0.3			
						4.1	0.3			
						3.9	0.4			
						5.2	0.4			
					Average	4.833333333	0.408333333			
					Standard Deviation	1.275883532	0.131137217			
1928		-28.3	-130.3	12		4.4	0.7	X		
			229.7			4.2	0.6			
						4.2	0.6			
						2.9	0.5			
						2.4	0.5			
						4.4	0.6			
						3.9	0.8			
						5.6	0.8			
						5.6	0.7			
						5.3	0.7			
						4.6	0.7			
						4	0.7			
					Average	4.291666667	0.658333333			
					Standard Deviation	0.969027942	0.099620492			
1929		-29.3	-135.0	23.7		6.1	0.6	X		
			225.0			5.5	0.6			
						7.1	0.9			
						5.4	0.6			
						6.2	0.7			
						5.4	0.6			
						5	0.4			
						5.1	0.6			
						6.5	0.7			

1932		-34.0	-133.9	22.5		1.8	0.5	X		
			226.1			5.7	0.9			
						5.3	1.1			
						5.3	0.6			
						4.2	0.7			
						2.1	0.4			
						3.2	0.4			
						3.1	0.3			
						2.5	0.4			
						1.9	0.5			
						4.6	0.7			
						4.3	0.4			
				Average		3.66666667	0.575			
				Standard Deviation		1.413784948	0.237888438			
1933		-38.0	-130.7	18		7.3	0.7	X		
			229.3			6.9	0.9			
						4.1	0.9			
						4.2	0.6			
						4.4	0.4			
						1.8	0.3			
						1.1	0.4			
						4.9	0.6			
						3.1	0.5			
						7.7	0.7			
						8.2	0.9			
						5.6	1.3			
				Average		4.94166667	0.683333333			
				Standard Deviation		2.288889502	0.282306517			
1934		-35.0	-138.0	12.8		7.1	0.9	X		
			222.0			6.4	0.7			
						5.5	0.6			
						3.8	0.6			
						0	0.5			
						5.7	0.9			

						7.4	0.7			
						7	0.8			
						7	0.9			
						4.8	0.9			
						6.2	0.6			
						6.4	0.6			
					Average	5.608333333	0.725			
					Standard Deviation	2.051809992	0.148477118			
1935		-40.6	-136.4	16.5		9	1	X		
			223.6			8.8	0.9			
						6.5	0.5			
						3.7	0.5			
						2.4	0.3			
						3.8	0.4			
						3.7	0.5			
						6	0.6			
						6.8	0.4			
						8.2	0.6			
						7.6	0.7			
						7.6	0.6			
					Average	6.175	0.583333333			
					Standard Deviation	2.25030301	0.203752672			
1936		-45.3	-134.9	14.6		3.5	0.5	X		
			225.1			6.7	0.7			
						8.9	0.8			
						9.9	1.1			
						7.1	0.5			
						3.8	0.2			
						2.2	0.3			
						3	0.5			
						3.8	0.6			
						5.4	0.5			
						8.3	1			
						6.3	0.7			

				Average	5.741666667	0.616666667			
				Standard Deviation	2.51593407	0.262274434			
1937	-42.7	-137.9	8.9		5.7	0.5	X		
		222.1			6.1	0.6			
					7.9	0.9			
					8.2	1			
					6.6	0.7			
					7.2	0.8			
					8.2	1.6			
					6.8	0.6			
					5.7	0.5			
					6.1	0.8			
					4.9	0.7			
					5.7	0.6			
				Average	6.591666667	0.775			
				Standard Deviation	1.088333449	0.301887998			
1938	-46.3	-132.2	9.9		7.7	0.6	X		
		227.8			9.5	0.7			
					6.5	0.8			
					3.4	0.3			
					2.2	0.4			
					1.8	0.4			
					4.7	0.6			
					4.1	0.5			
					6.1	0.6			
					6.8	0.6			
					6	0.4			
					5.3	0.6			
				Average	5.341666667	0.541666667			
				Standard Deviation	2.245584894	0.144337567			
1939	-49.4	-137.8	11.7		11.5	0.8	X		
		222.2			8.8	0.5			
					8.8	0.7			

						11.1	0.9			
						9.7	0.5			
						8.5	0.6			
						7.6	0.6			
						7.2	0.6			
						9	0.7			
						10.7	0.5			
						11.7	0.9			
						10.4	0.8			
					Average	9.583333333	0.675			
					Standard Deviation	1.499595905	0.148477118			
1940		-54.6	-138.6	10.8		11.7	0.5			
			221.4			13	0.8		X	
						12.8	0.9			
						12.5	0.9			
						9.6	0.6			
						10.3	0.7			
						10.2	0.5			
						9.5	0.5			
						13.8	1.3			
						12.4	0.9			
						11.7	0.7			
						13.1	0.8			
					Average	11.71666667	0.758333333			
					Standard Deviation	1.472680508	0.231431644			
1941		-56.5	-135.0	9		11.4	0.7			
			225.0			12.6	0.7		X	
						13.9	1.1			
						11.5	0.9			
						10.9	0.7			
						11.1	0.8			
						9.7	0.6			
						10	0.6			
						10.6	0.7			

1944		-50.3	-139.6	11.5		11.2	0.8			
			220.4			11.1	0.9			X
						10.3	0.6			
						11.1	0.5			
						9.4	0.8			
						9.7	0.7			
						9.9	1.2			
						10.3	0.9			
						10.4	0.8			
						9.2	0.6			
						9	0.7			
						11.1	0.8			
				Average		10.225	0.775			
				Standard Deviation		0.792148976	0.181533869			
1945		-69.6	-134.1	15		11.2	11.1	X		
			225.9			10.3	0.7			
						12.6	1.2			
						6.8	0.2			
						8.4	0.3			
						6.9	0.3			
						4.9	0.1			
						7.7	0.3			
						11.1	1.2			
						7	0.2			
						9.2	0.5			
						9.6	0.4			
				Average		8.808333333	1.375			
				Standard Deviation		2.255683059	3.084602523			
1946		-63.2	-134.0	20.2		12.2	0.8	X		
			226.0			14.2	1.2			
						11.9	0.9			
						12.7	1			
						10.7	0.4			
						8.7	0.3			

						7.4	0.2			
						10.1	0.4			
						10.9	0.6			
						10.2	0.5			
						13.5	1.4			
						12.9	1			
					Average	11.28333333	0.725			
					Standard Deviation	2.001741666	0.381682876			
1947		-65.0	-136.2	16.5		14	1	X		
			223.8			14.1	1.1			
						14.2	1.1			
						12.6	0.7			
						8.8	0.6			
						9.2	0.5			
						8.7	0.5			
						9.3	0.3			
						9.8	0.3			
						12.8	0.8			
						12.3	0.6			
						14.3	1.9			
					Average	11.675	0.783333333			
					Standard Deviation	2.325012219	0.446874669			
1948		-61.4	-134.8	7		13.7	1.3	X		
			225.2			12.9	0.9			
						12.7	0.8			
						12.1	0.9			
						12.7	0.9			
						12.1	0.6			
						12.3	0.8			
						12.2	0.9			
						12.4	0.6			
						12.6	0.8			
						12.8	0.8			
						10.9	0.5			

				Average	12.45	0.816666667			
				Standard Deviation	0.658510716	0.203752672			
1949	-62.5	-137.2	23.5		14.1	1.6	X		
		222.8			17.8	1.2			
					11.7	1.4			
					13.7	1.5			
					11.6	0.8			
					10.2	0.4			
					9.1	0.3			
					9.5	0.4			
					12.5	0.5			
					13	0.8			
					14.4	1.5			
					14.1	0.9			
				Average	12.64166667	0.941666667			
				Standard Deviation	2.44148179	0.483281084			
1950	-66.8	-128.1	11.5		10.5	0.5	X		
		231.9			10.3	0.7			
					11.8	1			
					13.4	2.4			
					10.3	0.9			
					12.2	1.3			
					8.3	0.3			
					9.3	0.6			
					8.6	0.5			
					10.5	0.7			
					11.9	1.1			
					11.3	0.9			
				Average	10.7	0.908333333			
				Standard Deviation	1.509966887	0.548482756			
1951	-66.1	-122.4	18		13.2	1.4	X		
		237.6			13.5	1.2			
					12.9	1.1			

						13.3	1.4			
						8.1	0.4			
						7.7	0.4			
						7.9	0.5			
						10.9	1.2			
						10.3	0.9			
						13.7	1.6			
						14.8	1.5			
						14.1	2			
					Average	11.7	1.133333333			
					Standard Deviation	2.608726614	0.503322296			
1952		-62.6	-123.4	10		11	0.6	X		
			236.6			10.3	0.6			
						13.9	1.3			
						15.2	1.2			
						12.1	0.2			
						12.4	0.9			
						11.2	0.7			
						11	1			
						11.1	1.2			
						10.9	0.8			
						11.6	1			
						11.1	0.6			
					Average	11.81666667	0.841666667			
					Standard Deviation	1.418599395	0.320392751			
1953		-64.7	-126.6	31.6		10.9	0.8	X		
			233.4			9.9	0.6			
						7.3	0.3			
						7.6	0.8			
						8	0.6			
						8	0.4			
						11.1	1			
						8.5	0.2			
						10.6	0.6			

1956		-52.5	-129.3	15.6		9.4	0.8			
			230.7			9.8	1			X
						9.5	0.6			
						7.2	0.6			
						6.1	0.5			
						7.6	0.6			
						5.3	0.6			
						4.7	0.3			
						9.5	0.6			
						7	0.5			
						5.1	0.5			
						9.3	0.7			
				Average		7.541666667	0.608333333			
				Standard Deviation		1.927531786	0.172986249			
1957		-52.9	-124.5	6.6		8	0.7			
			235.5			10.8	0.9			X
						11.1	1.3			
						7.1	0.7			
						5	0.5			
						4.2	0.7			
						4.8	0.5			
						4.4	0.5			
						5	0.5			
						7.6	0.7			
						9.1	0.8			
						8.4	0.8			
				Average		7.125	0.716666667			
				Standard Deviation		2.453985626	0.228963408			
1958		-53.6	-120.6	7.1		6.7	0.5			
			239.4			8.8	0.8			X
						9.1	1			
						0.8	0.2			
						0.6	0.1			
						1	0.2			

						0.5	0.2			
						1.1	0.3			
						4.6	0.5			
						9.4	0.9			
						11.3	1.2			
						10.5	1.4			
					Average	5.366666667	0.608333333			
					Standard Deviation	4.373958751	0.439955232			
1959		-51.4	-125.0	12.1		7.5	0.9			
			235.0			8	0.6		X	
						5.1	0.4			
						4.9	0.8			
						4.7	0.6			
						5.5	0.6			
						5.3	0.5			
						4.1	0.1			
						7	0.7			
						8	0.5			
						8.5	0.8			
						8.2	0.9			
					Average	6.4	0.616666667			
					Standard Deviation	1.609065228	0.228963408			
1960		-47.2	-121.0	12.6		3.6	0.4	X		
			239.6			5.6	0.7			
						6.6	0.7			
						4.7	0.6			
						3.8	0.4			
						4.2	0.5			
						0.9	0.5			
						4	0.5			
						2.5	0.4			
						4.6	0.7			
						4.5	0.4			
						3.8	0.5			

				Average	4.066666667	0.525			
				Standard Deviation	1.430405749	0.121543109			
1961	-43.6	-120.4	18.1		11.4	1.1	X		
		239.6			7	0.8			
					7.4	0.9			
					8.1	0.8			
					5.9	0.5			
					2.1	0.4			
					2.6	0.3			
					2.1	0.6			
					5.6	0.6			
					6.8	0.7			
					5.3	0.7			
					12.3	1			
				Average	6.383333333	0.7			
				Standard Deviation	3.271594922	0.23741027			
1962	-47.5	-127.9	12.5		7.4	0.8	X		
		232.1			6.9	0.6			
					5.3	0.3			
					2.9	0.3			
					5.6	0.6			
					2.6	0.4			
					4.3	0.3			
					9.8	0.5			
					4	0.6			
					7	1			
					9.5	0.7			
					6.4	0.5			
				Average	5.975	0.55			
				Standard Deviation	2.322273572	0.215322169			
1963	-42.1	-126.7	13		5.3	0.3	X		
		233.3			10.5	0.8			
					8.6	0.9			

						5.1	0.5			
						4.7	0.5			
						3.4	0.6			
						5.7	0.54			
						5.3	0.6			
						5.8	0.6			
						5.9	0.9			
						10.6	0.8			
						10.4	0.7			
					Average	6.775	0.645			
					Standard Deviation	2.535251467	0.18073084			
1964		-49.4	-121.5	10		5.6	0.7	X		
			238.5			5.9	0.5			
						4.2	0.6			
						4.3	0.5			
						6.5	0.7			
						5.6	0.6			
						5.8	0.5			
						5.4	0.5			
						3	0.4			
						4.5	0.5			
						2.8	0.5			
						2.3	0.5			
					Average	4.658333333	0.541666667			
					Standard Deviation	1.371434772	0.090033664			
1965		-36.5	-124.6	18.8		4.3	0.6	X		
			235.4			5	0.6			
						3.9	0.5			
						4.2	0.5			
						2.6	0.4			
						3.1	0.4			
						4.2	0.8			
						2.6	0.5			
						4.2	0.7			

1968		-37.2	-122.0	15.4		4.5	0.6	X		
			238.0			7.3	0.8			
						4.2	0.6			
						4.8	0.6			
						3.9	0.6			
						2.9	0.6			
						2	0.4			
						4.3	0.4			
						3.8	0.5			
						3	0.6			
						4.5	0.6			
						5.6	0.6			
					Average	4.233333333	0.575			
					Standard Deviation	1.359367054	0.105528971			
1969		-32.8	-124.8	12.5		5.8	0.7	X		
			235.2			4.4	0.8			
						6.9	0.9			
						6.9	0.7			
						6.5	0.6			
						3.8	0.7			
						6.1	0.7			
						5.4	0.7			
						3.4	0.5			
						4.7	0.8			
						5.2	0.7			
						5.6	0.7			
					Average	5.391666667	0.708333333			
					Standard Deviation	1.147692019	0.099620492			
1970		-29.2	-122.3	11.5		5.7	1	X		
			237.7			5.2	0.7			
						4.3	0.7			
						5.4	0.8			
						4.5	0.7			
						2.5	0.6			

						5.1	0.6			
						5.8	0.7			
						5.1	0.7			
						6.9	0.8			
						6.8	0.8			
						5.7	0.7			
					Average	5.25	0.733333333			
					Standard Deviation	1.165020484	0.107308674			
1971		-25.7	-123.1	10.5		5.1	0.5	X		
			236.9			5.6	0.7			
						4.8	0.9			
						7	1			
						2.8	0.5			
						3.8	0.5			
						3	0.5			
						5	0.6			
						5.1	0.7			
						5.4	0.4			
						4.6	0.5			
						6.2	0.7			
					Average	4.866666667	0.625			
					Standard Deviation	1.215306421	0.181533869			
1972		-22.0	-123.2	12.6		5.6	0.7	X		
			236.8			5.6	0.8			
						6.3	0.8			
						5.8	0.6			
						5.2	0.5			
						3.5	0.5			
						3.1	0.5			
						5.2	0.8			
						5.3	0.7			
						5.1	0.7			
						4.6	0.6			
						5.8	0.6			

				Average	5.091666667	0.65			
				Standard Deviation	0.943357961	0.116774842			
1973	-21.1	-128.8	10.3		9.1	0.8	X		
		231.2			10.2	0.8			
					6.1	0.5			
					5.9	0.4			
					6.7	0.7			
					5.2	0.7			
					4.1	0.5			
					4.5	0.6			
					5.2	0.5			
					4.5	0.5			
					5.1	0.6			
					8	0.7			
				Average	6.216666667	0.608333333			
				Standard Deviation	1.93993127	0.131137217			
1974	-24.3	-120.4	7		3.8	0.6	X		
		239.6			4.5	0.7			
					4.9	0.7			
					4.1	0.5			
					4	0.5			
					4	0.6			
					3.6	0.6			
					4.2	0.6			
					4	0.6			
					3.6	0.5			
					3.1	0.5			
					3.9	0.4			
				Average	3.975	0.566666667			
				Standard Deviation	0.455521679	0.088762536			
1975	-18.8	-126.4	15		3.5	0.7	X		
		233.6			3.9	0.5			
					4.7	0.7			

						3.4	0.6			
						3.7	0.5			
						5	0.7			
						6	0.7			
						4.6	0.5			
						3.5	0.6			
						4.5	0.6			
						4.8	0.8			
						2.8	0.6			
					Average	4.2	0.625			
					Standard Deviation	0.887283905	0.09653073			
1976		-19.1	-123.5	16.7		5.3	0.9	X		
			236.5			5.7	0.7			
						5.5	0.9			
						4.5	0.6			
						4.3	0.4			
						4.7	0.6			
						2.5	0.5			
						5.8	0.8			
						5.1	0.6			
						5.8	0.6			
						4.9	0.7			
						3.9	0.5			
					Average	4.833333333	0.65			
					Standard Deviation	0.957585347	0.15666989			
1977		-15.1	-125.6	7.6		4.2	0.9	X		
			234.4			5.2	0.7			
						6.3	0.9			
						5.3	0.8			
						5	0.7			
						5	0.7			
						3.3	0.7			
						3.7	0.7			
						3.9	0.7			

1980		-8.0	-124.0	24.1		3.6	0.5	X		
			236.0			3.4	0.5			
						4.4	0.4			
						2.3	0.5			
						2.9	0.5			
						3.6	0.4			
						4	0.5			
						3.8	0.5			
						3.2	0.5			
						2.9	0.5			
						4.3	0.5			
						2.9	0.4			
				Average		3.441666667	0.475			
				Standard Deviation		0.631676461	0.045226702			
1981		-3.0	-128.9	19.5		1.9	0.5	X		
			231.1			2	0.5			
						3.8	0.4			
						1.9	0.5			
						2.1	0.5			
						1.1	0.4			
						2.5	0.4			
						0.7	0.3			
						1.9	0.5			
						2.3	0.5			
						2.4	0.4			
						2.9	0.5			
				Average		2.125	0.45			
				Standard Deviation		0.792148976	0.067419986			
1982		-1.3	-125.0	20.5		1.2	0.6	X		
			235.0			2.5	0.4			
						2.1	0.4			
						2.1	0.3			
						2.3	0.3			
						2.4	0.4			

						2.1	0.4			
						1.8	0.6			
						3	0.5			
						3.2	0.5			
						3.2	0.6			
						2.6	0.5			
					Average	2.375	0.458333333			
					Standard Deviation	0.584846522	0.108362467			
1983		-6.8	-125.1	12.7		2.2	0.4	X		
			234.9			3.7	0.5			
						4.7	0.5			
						3.7	0.5			
						2.8	0.4			
						3.2	0.4			
						3.3	0.5			
						3	0.4			
						3.3	0.4			
						2.9	0.4			
						3.1	0.5			
						3	0.4			
					Average	3.241666667	0.441666667			
					Standard Deviation	0.609706835	0.051492865			
1984		-5.7	-128.3	14.6		3.8	0.5	X		
			231.7			3.1	0.5			
						3.2	0.5			
						4.1	0.6			
						3.8	0.6			
						2.8	0.5			
						2.9	0.6			
						3.7	0.6			
						3.6	0.6			
						3.1	0.6			
						4.4	0.7			
						3.1	0.6			

				Average	3.466666667	0.575			
				Standard Deviation	0.505125247	0.062158156			
1985	-4.8	-119.9	8.5		4.6	0.7	X		
		248.1			4.9	0.8			
					5.3	0.7			
					4.3	0.8			
					3.7	0.6			
					3.5	0.7			
					3.8	0.6			
					4.3	0.6			
					4.2	0.6			
					4.4	0.6			
					3.4	0.7			
					4	0.6			
				Average	4.2	0.666666667			
				Standard Deviation	0.564076075	0.077849894			
1986	-1.4	-117.7	21.2		4.6	0.7	X		
		242.3			3.3	0.7			
					5.2	0.5			
					3.2	0.6			
					5.4	0.5			
					4.4	0.6			
					3.7	0.6			
					4.4	0.6			
					3.8	0.6			
					3.9	0.6			
					3	0.5			
					2.6	0.6			
				Average	3.958333333	0.591666667			
				Standard Deviation	0.868078687	0.066855792			
1987	-8.1	-113.5	11		4.7	0.8	X		
		246.5			4.3	0.7			
					4.4	0.6			

						4.1	0.9			
						3.9	0.9			
						3.7	0.8			
						4	0.9			
						4.4	0.7			
						4.2	0.6			
						4	0.6			
						4.5	0.7			
						4.1	0.7			
					Average	4.191666667	0.741666667			
					Standard Deviation	0.281096338	0.116450015			
1988		-10.8	-116.4	13		4.8	0.7	X		
			243.6			3.7	0.8			
						4.7	0.6			
						3.6	0.7			
						2.7	0.8			
						3.9	0.8			
						3.7	0.8			
						3.7	0.7			
						3.6	0.8			
						4.2	0.7			
						4.9	0.7			
						3.7	0.7			
					Average	3.933333333	0.733333333			
					Standard Deviation	0.625711716	0.065133895			
1889		-14.4	-114.4	12.5		3.5	0.6	X		
			245.6			5.2	0.5			
						4.9	0.7			
						4.4	0.6			
						4.8	0.7			
						5	0.9			
						5.2	0.7			
						4.8	0.5			
						4.3	0.7			

1992		-22.3	-115.3	15		4.8	0.4	X		
			244.7			4.6	0.6			
						5.5	0.5			
						5	0.7			
						4.7	0.6			
						4.2	0.5			
						3.5	0.4			
						4.1	0.5			
						4.4	0.7			
						5.7	0.5			
						4	0.5			
						4.5	0.5			
					Average	4.583333333	0.533333333			
					Standard Deviation	0.622068884	0.098473193			
1993		-24.4	-117.9	5		4.8	0.5	X		
			242.1			5.9	0.7			
						4.3	0.6			
						4.8	0.5			
						4	0.5			
						3.9	0.4			
						3.6	0.3			
						3.8	0.5			
						4.7	0.5			
						5.1	0.6			
						5.6	0.6			
						4.5	0.4			
					Average	4.583333333	0.508333333			
					Standard Deviation	0.714567044	0.108362467			
1994		-27.4	-110.0	13.5		5	0.6	X		
			250.0			6.4	0.6			
						4.3	0.6			
						4.9	0.5			
						4.4	0.5			
						3.3	0.5			

						4.6	0.4			
						4.6	0.5			
						4.2	0.6			
						4.4	0.6			
						5.4	0.6			
						5.1	0.5			
					Average	4.71666667	0.54166667			
					Standard Deviation	0.752973902	0.066855792			
1995		-32.7	-117.9	11.3		4.3	0.6	X		
			242.1			5.7	0.5			
						4	0.5			
						3.5	0.6			
						5.8	0.6			
						3.5	0.7			
						3.4	0.7			
						4	0.6			
						4	0.5			
						5.6	0.5			
						4.5	0.5			
						1.6	0.4			
					Average	4.158333333	0.558333333			
					Standard Deviation	1.181261524	0.090033664			
1996		-33.5	-113.9	11.6		8.4	1.1	X		
			246.9			5.2	0.7			
						6.5	1.9			
						4.5	0.5			
						6.7	0.5			
						2.9	0.7			
						3.3	0.5			
						3.5	0.5			
						4.4	0.5			
						5.9	0.7			
						5.6	0.6			
						4.8	0.6			

				Average	5.141666667	0.733333333			
				Standard Deviation	1.591716245	0.405268336			
1997	-35.3	-116.9	9.9		4.7	0.7	X		
		243.1			6.1	0.6			
					6.2	1			
					4.2	0.5			
					3.4	0.6			
					3.9	1			
					4.2	0.3			
					3.8	0.7			
					4.9	0.6			
					2	0.6			
					4.4	0.6			
					6.2	0.6			
				Average	4.5	0.65			
				Standard Deviation	1.244624807	0.19306146			
1998	-39.8	-112.2	10.5		6.3	1	X		
		247.8			5.8	0.8			
					7.7	0.9			
					6.2	0.7			
					4.6	0.5			
					4.2	0.5			
					2.6	0.4			
					3.3	0.5			
					3.9	0.6			
					7	0.8			
					6.4	0.9			
					6	0.6			
				Average	5.333333333	0.683333333			
				Standard Deviation	1.576724645	0.194624736			
1999	-38.7	-116.5	10.1		5.4	0.8	X		
		243.5			4.9	0.6			
					3	0.7			

						4.2	0.4			
						5.9	0.7			
						4.5	0.6			
						4.3	0.7			
						4.1	0.8			
						5.5	0.6			
						5.3	0.6			
						4.7	0.7			
						4.7	0.8			
					Average	4.708333333	0.666666667			
					Standard Deviation	0.778644899	0.115470054			
2000		-43.9	-115.8	15.4		4.4	0.9	X		
			244.2			4	0.7			
						4	0.6			
						6.4	0.8			
						3.5	0.5			
						5.6	0.9			
						4.7	0.6			
						3.6	0.5			
						3.1	0.5			
						4.1	0.6			
						1.6	0.6			
						3.7	0.4			
					Average	4.058333333	0.633333333			
					Standard Deviation	1.206390811	0.161432977			
2001		-48.8	-110.3	6.8		5.1	0.5	X		
			249.7			2.9	0.9			
						5.8	0.9			
						2	0.4			
						2.6	0.4			
						0.7	0.3			
						0.8	0.4			
						1.7	0.3			
						3.5	0.3			

2004		-42.5	-112.6	6.2		3.8	0.5	X		
						2.8	0.5			
						5.3	0.4			
						4	0.5			
						5.3	0.5			
						3.7	0.3			
						3	0.4			
						4.4	0.4			
						2.9	0.4			
						4.8	0.5			
						4.1	0.6			
						2.6	0.4			
					Average	3.891666667	0.45			
					Standard Deviation	0.943357961	0.079772404			
2005		-51.3	-116.5	11.4		5.9	0.7	X		
						7	0.4			
						8.4	0.9			
						2.6	0.4			
						5.8	0.6			
						9	0.3			
						8.9	0.7			
						5.3	0.5			
						4.7	0.5			
						8.2	0.9			
						4.6	0.4			
						3.6	0.5			
					Average	6.166666667	0.566666667			
					Standard Deviation	2.135983203	0.196946386			
2006		-53.0	-118.5	17.3		6.8	0.8	X		
						3.5	0.4			
						5	0.5			
						3.8	0.2			
						4	0.4			
						4.4	0.5			

						2.6	0.2			
						4.3	0.4			
						4	0.4			
						6.4	0.6			
						6.8	0.7			
						8.7	0.9			
					Average	5.025	0.5			
					Standard Deviation	1.768987898	0.217422923			
2007		-58.1	-112.7	17.8		8.3	0.8	X		
			247.3			9.1	1.1			
						9.1	0.7			
						3.4	0.5			
						9.6	0.8			
						8.6	0.4			
						7.1	0.4			
						2.8	0.3			
						5.5	0.4			
						5.2	0.3			
						4.4	0.3			
						9.6	0.6			
					Average	6.891666667	0.55			
					Standard Deviation	2.510146078	0.254057975			
2008		-52.9	-110.5	28.2		14.2	1.5	X		
			249.5			6.4	0.5			
						12.7	1.7			
						8.6	0.9			
						5.4	0.5			
						3.3	0.4			
						3.9	0.2			
						2.9	0.2			
						5.9	0.6			
						7.4	0.5			
						7.6	0.8			
						8.1	0.5			

				Average	7.2	0.691666667			
				Standard Deviation	3.469084239	0.471859635			
2009	-59.7	-117.8	15		6.7	0.3	X		
		242.2			5.5	0.5			
					7.9	0.4			
					8.6	0.5			
					7.9	0.8			
					4.8	0.5			
					5	0.4			
					5.3	0.3			
					5.1	0.2			
					7	0.7			
					7.5	0.3			
					6.4	0.3			
				Average	6.475	0.433333333			
				Standard Deviation	1.319865696	0.177525073			
2010	-61.9	-114.3	15.7		7	0.4	X		
		245.7			9	0.5			
					5.9	0.3			
					6.5	0.3			
					4	0.4			
					5.8	0.5			
					4.5	0.2			
					6.1	0.3			
					4.5	0.3			
					9.2	0.3			
					6.3	0.3			
					6	0.4			
				Average	6.233333333	0.35			
				Standard Deviation	1.609253544	0.090453403			
2011	-67.7	-114.4	10.5		8.4	0.4	X		
		245.6			7.4	0.2			
					8.1	0.2			

						10.2	1.7			
						7.2	0.2			
						9.1	0.4			
						10.4	1			
						9.8	0.7			
						9.4	0.8			
						8.5	0.7			
						8.9	0.5			
						10.7	1.2			
					Average	9.008333333	0.666666667			
					Standard Deviation	1.141337599	0.457926817			
2012		-65.2	-110.8	11.2		11.1	1	X		
			249.2			13.9	2			
						10.5	1			
						12.9	1.1			
						14.4	1.4			
						11.1	0.8			
						3.4	0.2			
						4	0.2			
						4.2	0.2			
						2.9	0.2			
						10.5	1.1			
						10.1	0.9			
					Average	9.083333333	0.841666667			
					Standard Deviation	4.258004939	0.563202423			
2013		-65.2	-106.4	5		8.9	0.9	X		
			254.6			8.7	0.7			
						10.4	7.4			
						5.2	0.4			
						5.9	0.4			
						4.7	0.3			
						3.9	0.2			
						8.6	0.4			
						5.1	0.3			

2016		-59.9	-108.8	26.1		12.8	0.9	X		
			257.2			11.7	1.4			
						8.4	0.2			
						12.5	0.8			
						2.9	0.2			
						6.7	0.5			
						6	0.5			
						5.9	0.8			
						3.2	0.3			
						7.7	1.1			
						3.7	0.3			
						9	0.7			
					Average	7.541666667	0.641666667			
					Standard Deviation	3.48175983	0.377692355			
2017		-56.7	-105.4	13.5		8	0.8	X		
			254.6			9.8	1.7			
						8	1.1			
						3.3	0.4			
						3.7	0.3			
						2.9	0.3			
						1.7	0.3			
						2	0.3			
						4.2	0.5			
						7.6	0.8			
						7.4	0.5			
						9.9	1			
					Average	5.708333333	0.666666667			
					Standard Deviation	3.031188886	0.433449868			
2018		-55.7	-107.3	20		5.2	0.3	X		
			252.7			6.4	0.5			
						8	0.8			
						2.4	0.5			
						3.8	0.5			
						2.6	0.3			

						3.2	0.3			
						3.1	0.3			
						7.3	0.7			
						5.7	0.4			
						6.4	0.5			
						6.7	0.5			
					Average	5.066666667	0.466666667			
					Standard Deviation	1.962990915	0.161432977			
2019		-53.2	-101.2	31.3		8.2	0.8	X		
						9	0.9			
						9.1	0.5			
						2.5	0.3			
						1.3	0.2			
						1.5	0.2			
						6.7	0.5			
						0.3	0.2			
						1.4	0.3			
						2	0.2			
						0.6	0.5			
						6.7	0.8			
					Average	4.108333333	0.45			
					Standard Deviation	3.501806893	0.261116484			
2020		-50.5	-101.1	10.9		6.6	0.7	X		
			259.0			6.9	0.7			
						8.2	0.7			
						4.6	0.4			
						7.8	0.9			
						5.1	0.4			
						3.4	0.5			
						4.8	0.5			
						4.7	0.4			
						5.3	0.9			
						6.6	0.9			
						7.4	0.8			

				Average	5.95	0.65			
				Standard Deviation	1.498180715	0.202259959			
2021	-46.8	-107.5	16.6		7.2	1	X		
		252.5			7.3	0.7			
					4.5	0.5			
					4.7	0.4			
					4.1	0.4			
					3.1	0.4			
					5.8	0.5			
					3.3	0.4			
					6.5	0.6			
					6.4	0.8			
					7.6	1.1			
					6.5	1			
				Average	5.583333333	0.65			
				Standard Deviation	1.582767044	0.264575131			
2022	-44.9	-102.4	7.3		9.4	2.1	X		
		257.6			4.6	0.6			
					6.1	0.7			
					4.3	0.6			
					6.1	0.7			
					5.5	0.7			
					6	1			
					4.7	0.8			
					6.1	0.9			
					6.6	1			
					9.8	2.3			
					4	0.6			
				Average	6.1	1			
				Standard Deviation	1.835508352	0.579968651			
2023	-40.8	-101.0	7.5		6.2	1	X		
		259.0			7	1			
					7.3	1.2			

						4.8	0.7			
						4.1	0.6			
						4.1	0.5			
						3.5	0.5			
						4.2	0.5			
						5.5	0.8			
						5.4	0.7			
						6.4	0.8			
						6.5	0.7			
					Average	5.416666667	0.75			
					Standard Deviation	1.272673159	0.223606798			
2024		-45.4	-108.4	8.1		6	0.6	X		
			251.6			7	0.8			
						7	1.2			
						6.5	0.6			
						1.8	0.7			
						1.5	0.4			
						3	0.5			
						2.1	0.5			
						3.4	0.4			
						3.2	0.4			
						4.3	0.8			
						5.6	0.5			
					Average	4.283333333	0.616666667			
					Standard Deviation	2.059052445	0.232900031			
2025	Chant	-40.9	-109.2	33.8		7.2	1.3	X		
			250.8			6.3	0.8			
						5.8	0.7			
						4.7	0.4			
						3.6	0.4			
						3.3	0.4			
						2.8	0.5			
						2.8	0.4			
						2.7	0.5			

2028		-37.8	-106.9	6.4		5.7	0.7	X		
			253.1			6.9	0.6			
						4	0.6			
						4	0.5			
						4.6	0.7			
						3.5	0.6			
						3.1	0.5			
						3.7	0.3			
						4.2	0.6			
						2.1	0.5			
						5.1	0.8			
						4	0.7			
					Average	4.241666667	0.591666667			
					Standard Deviation	1.242035231	0.131137217			
2029		-27.9	-102.9	19.6		3.8	0.4	X		
			257.1			2.9	0.5			
						3	0.3			
						2.2	0.3			
						1.4	0.3			
						1.3	0.4			
						2.3	0.3			
						1.8	0.3			
						2.7	0.3			
						3	0.3			
						4.4	0.4			
						4.7	0.4			
					Average	2.791666667	0.35			
					Standard Deviation	1.090836487	0.067419986			
2030		-29.3	-106.2	7.6		4.7	0.5	X		
			253.8			4.1	0.2			
						4.5	0.5			
						4.5	0.3			
						3.1	0.5			
						3.9	0.5			

						3	0.4			
						1.5	0.5			
						2.6	0.4			
						2.5	0.4			
						4.5	0.3			
						5	0.5			
					Average	3.658333333	0.416666667			
					Standard Deviation	1.092501994	0.10298573			
2031		-22.8	-108.5	11		4.3	0.5	X		
			251.5			3.4	0.5			
						4.6	0.5			
						3.6	0.4			
						4.2	0.6			
						5	0.5			
						3.9	0.6			
						4.5	0.4			
						3.7	0.5			
						4.7	0.6			
						5	0.5			
						3.6	0.5			
					Average	4.208333333	0.508333333			
					Standard Deviation	0.563202423	0.066855792			
2032		-22.4	-101.5	9.5		3.7	0.5	X		
			258.5			4.3	0.4			
						3.9	0.4			
						3.3	0.3			
						2.9	0.3			
						3.1	0.4			
						2	0.2			
						3.2	0.2			
						3.3	0.3			
						3.4	0.4			
						4.1	0.4			
						2.7	0.3			

				Average	3.325	0.341666667			
				Standard Deviation	0.634070544	0.090033664			
2033	-24.8	-105.1	17.1		6.4	0.6	X		
		254.9			5.1	0.4			
					4.2	0.5			
					4.4	0.5			
					4.2	0.6			
					4.1	0.6			
					4.2	0.5			
					6.2	0.5			
					5.4	0.7			
					5.2	0.5			
					4.7	0.5			
					6	0.7			
				Average	5.008333333	0.55			
				Standard Deviation	0.841490381	0.090453403			
2034	-15.2	-102.5	10.5		2.7	0.4	X		
		257.5			2.8	0.5			
					0.3	0.4			
					3.2	0.4			
					3.3	0.4			
					3.5	0.5			
					3.7	0.4			
					4.4	0.5			
					4.9	0.5			
					2.5	0.5			
					3.4	0.4			
					3.2	0.4			
				Average	3.158333333	0.441666667			
				Standard Deviation	1.128521425	0.051492865			
2035	-13.0	-107.0	5.5		3.3	0.4	X		
		253.0			2.7	0.2			
					3.7	0.3			

						2.7	0.3			
						3.3	0.3			
						2.2	0.3			
						2.2	0.3			
						2.4	0.3			
						2.5	0.4			
						2.2	0.4			
						2.2	0.3			
						2.9	0.4			
					Average	2.691666667	0.325			
					Standard Deviation	0.512495381	0.062158156			
2036		-19.3	-102.7	6.5		3.5	0.5	X		
			257.3			3.7	0.5			
						3.4	0.4			
						3.6	0.3			
						4.3	0.3			
						3.1	0.4			
						2.7	0.4			
						2.9	0.4			
						2.8	0.4			
						3.2	0.4			
						2.6	0.4			
						3	0.4			
					Average	3.233333333	0.4			
					Standard Deviation	0.490516117	0.060302269			
2037		-10.3	-106.9	17.2		3.9	0.3	X		
			253.1			3.8	0.4			
						3.4	0.4			
						3.3	0.4			
						2.8	0.4			
						3.9	0.5			
						2.8	0.4			
						2.3	0.4			
						2.4	0.2			

2040		-1.3	-108.9	17		3.6	0.5	X		
			251.1			3.9	0.6			
						4.4	0.6			
						4.7	0.7			
						4.8	0.6			
						3	0.4			
						2.9	0.4			
						4	0.5			
						3	0.4			
						3.1	0.6			
						4.5	0.5			
						4.8	0.6			
					Average	3.891666667	0.533333333			
					Standard Deviation	0.752521016	0.098473193			
2041		-2.4	-98.5	20		4.8	0.4	X		
			261.5			3.2	0.4			
						4.2	0.5			
						4.1	0.5			
						4.3	0.4			
						3.4	0.5			
						4.9	0.7			
						4.1	0.6			
						3.6	0.4			
						3.4	0.5			
						3.4	0.5			
						4.1	0.8			
					Average	3.958333333	0.516666667			
					Standard Deviation	0.561585958	0.126730446			
2042		-3.7	-96.1	14.3		5	0.5	X		
			263.9			4.9	0.5			
						4	0.4			
						3	0.5			
						3	0.4			
						3.8	0.3			

						5.2	0.5			
						4.5	0.5			
						3.8	0.5			
						4.1	0.5			
						4.8	0.5			
						5.4	0.5			
					Average	4.291666667	0.466666667			
					Standard Deviation	0.807305657	0.065133895			
2043		-2.4	-92.0	10		3.1	0.6	X		
			268.0			3.8	0.5			
						4.2	0.5			
						3.3	0.5			
						2.8	0.4			
						3.6	0.5			
						3.6	0.7			
						2.8	0.5			
						3.4	0.6			
						4	0.6			
						3.2	0.6			
						3.8	0.6			
					Average	3.466666667	0.55			
					Standard Deviation	0.447890679	0.079772404			
2044		-3.3	-90.3	16.8		3.7	0.5	X		
			269.7			4.1	0.5			
						3.9	0.4			
						4	0.5			
						3.6	0.4			
						3.1	0.4			
						2.6	0.4			
						2.3	0.4			
						3.4	0.3			
						3.7	0.5			
						4	0.5			
						3.3	0.5			

				Average	3.475	0.441666667			
				Standard Deviation	0.569090183	0.066855792			
2045	-5.0	-92.2	19		3.8	0.5	X		
		267.8			3.2	0.6			
					2	0.6			
					2.7	0.6			
					4	0.5			
					2.7	0.5			
					3	0.5			
					3.7	0.5			
					3.2	0.5			
					2.9	0.5			
					2.8	0.6			
					4	0.4			
				Average	3.166666667	0.525			
				Standard Deviation	0.611010093	0.062158156			
2046	-10.9	-91.8	15.4		1.7	0.4	X		
		268.2			2.7	0.5			
					1.3	0.4			
					1.9	0.5			
					2.1	0.4			
					2.4	0.5			
					1.5	0.5			
					1.7	0.5			
					1.4	0.4			
					2.3	0.5			
					2.4	0.4			
					2.5	0.4			
				Average	1.991666667	0.45			
				Standard Deviation	0.471859635	0.052223297			
2047	-15.5	-97.7	11.5		0.6	0.3	X		
		262.3			2.5	0.5			
					1.2	0.3			

						2.2	0.3			
						1.4	0.4			
						1.6	0.4			
						1.2	0.3			
						1.9	0.4			
						0.8	0.3			
						2.7	0.3			
						0.5	0.3			
						1.7	0.3			
					Average	1.525	0.341666667			
					Standard Deviation	0.714938014	0.066855792			
2048	Mare Orientale	-17.9	-97.3	11.5		15.5	5.3		X	
			262.7			14.8	4.4			
						14.4	4.1			
						15.1	3.9			
						14.1	3.9			
						13.7	4			
						13.7	3.6			
						14	3.5			
						14.1	3.5			
						14.4	3.8			
						14.9	4.2			
						15.1	4.1			
					Average	14.48333333	4.025			
					Standard Deviation	0.59058266	0.488271534			
2049	Hohmann	-18.1	-94.0	15.5		6.7	1.5		X	
			266.0			7.2	1.9			
						8.1	1.5			
						5.3	0.8			
						3.9	1.1			
						5.6	1.2			
						5	1.2			
						4.5	1			
						5.4	1.1			

2052		-24.0	-91.6	8.1		12.9	2.9		X	
			268.4			12.6	2.8			
						10.9	2.6			
						11.9	2.4			
						11.7	2.7			
						1.5	2.5			
						11.7	2.9			
						12.8	2.4			
						12.8	3.4			
						12.5	3.1			
						12.8	3.1			
						12.6	2.3			
				Average		11.39166667	2.758333333			
				Standard Deviation		3.17531912	0.336987546			
2053		-27.3	-92.4	13.9		3.3	0.5		X	
			267.6			1.8	0.5			
						1.9	0.3			
						0.4	0.2			
						1.6	0.4			
						3.2	0.4			
						2.1	0.4			
						2.6	0.4			
						2.3	0.5			
						3.4	0.5			
						2.4	0.4			
						2.4	0.3			
				Average		2.283333333	0.4			
				Standard Deviation		0.835391398	0.095346259			
2054		-27.3	-96.7	8.3		2.8	0.5		X	
			263.3			2.2	0.5			
						0.2	0.7			
						1.1	0.5			
						1.6	0.4			
						0.9	0.5			

						1.7	0.3			
						1.2	0.4			
						1.6	0.5			
						1.7	0.5			
						2.5	0.7			
						2.7	1			
					Average	1.683333333	0.541666667			
					Standard Deviation	0.775574079	0.183195541			
2055		-32.9	-98.3	9.8		4.9	0.7	X		
			261.7			5.4	0.7			
						5.7	0.7			
						6.7	0.7			
						4.9	0.6			
						4.1	0.5			
						5.8	0.7			
						3.1	0.6			
						3.7	0.6			
						4.6	0.7			
						3.7	0.6			
						4.9	0.5			
					Average	4.791666667	0.633333333			
					Standard Deviation	1.029084618	0.077849894			
2056	Focas	-33.9	-93.6	21.3		6.3	0.7	X		
			266.4			5.2	0.5			
						5.4	0.5			
						6.7	0.7			
						4.8	0.6			
						5.5	0.4			
						3.9	0.4			
						4.5	0.5			
						5.3	0.5			
						5.1	0.6			
						4.7	0.6			
						6.2	0.7			

				Average	5.3	0.558333333			
				Standard Deviation	0.802269508	0.108362467			
2057		-35.2	-92.6	11	4.2	0.5	X		
			267.4		6.2	0.5			
					6.2	0.6			
					5.6	0.7			
					5	0.6			
					4	0.5			
					4.3	0.5			
					3.2	0.4			
					3.8	0.4			
					4	0.5			
					4.1	0.4			
					3.3	0.4			
				Average	4.491666667	0.5			
				Standard Deviation	1.029084618	0.095346259			
2058	Drude	-38.9	-91.6	21.6	6.9	0.8	X		
			268.4		5.5	0.8			
					6.3	0.7			
					7.7	0.9			
					5.8	0.6			
					6.7	0.8			
					9.5	1.2			
					4.7	0.6			
					8.9	1			
					8.4	0.6			
					6.9	0.8			
					7.3	0.7			
				Average	7.05	0.791666667			
				Standard Deviation	1.412605587	0.178164037			
2059		-39.8	-95.1	16.9	6.9	0.6	X		
			264.9		6.7	0.7			
					5.3	0.6			

						5	0.6			
						3.1	0.5			
						3.8	0.6			
						4.4	0.6			
						6.1	0.6			
						5.3	0.5			
						3.7	0.4			
						5.7	0.6			
						7	0.6			
					Average	5.25	0.575			
					Standard Deviation	1.304885923	0.075377836			
2060		-42.3	-90.5	19		7	0.6	X		
			269.5			6	0.9			
						8.8	1.1			
						8.2	1.3			
						6.6	0.8			
						5.3	0.6			
						5	0.6			
						3.8	0.4			
						2.7	0.4			
						3.6	0.4			
						5.4	0.4			
						6.4	0.6			
					Average	5.733333333	0.675			
					Standard Deviation	1.82623972	0.295803989			
2061		-45.3	-60.4	19		7.7	1.1	X		
			269.6			8.9	0.9			
						10.6	0.8			
						7.3	0.8			
						5	0.8			
						3.7	0.6			
						3	0.4			
						4.8	0.6			
						3.7	0.4			

2064		-48.8	-95.3	9		8.8	0.8	X		
			264.7			7.2	0.8			
						5.4	0.6			
						6	0.6			
						4.8	0.6			
						4.4	0.4			
						4.3	0.7			
						3	0.5			
						4	0.5			
						4.4	0.6			
						6.5	0.6			
						7.2	1.2			
				Average		5.5	0.658333333			
				Standard Deviation		1.672776679	0.206522433			
2065		-50.3	-95.2	13.8		10.9	0.8	X		
			264.8			9.2	1.4			
						9.7	1.3			
						8.5	1.1			
						8.1	0.8			
						8.9	1.1			
						7.4	0.7			
						7.9	0.9			
						7.9	0.9			
						7.1	0.5			
						9.6	1			
						10.5	1.1			
				Average		8.808333333	0.966666667			
				Standard Deviation		1.204882743	0.253460893			
2066		-53.1	-95.5	7.1		7.7	0.9	X		
			264.5			8.6	0.7			
						9.2	0.9			
						4.9	0.5			
						3.6	0.3			
						4.9	0.3			

						5.7	0.5			
						4.7	0.4			
						4.6	0.3			
						5.9	0.6			
						5.9	0.5			
						8	0.9			
					Average	6.141666667	0.566666667			
					Standard Deviation	1.798715872	0.234843597			
2067		-56.9	-98.0	9.3		8.7	0.4	X		
			262.0			9.6	1			
						9.1	0.7			
						3.1	0.3			
						3.2	0.3			
						5.1	0.5			
						2.9	0.2			
						4.8	0.3			
						6.5	0.2			
						7.9	0.5			
						3.6	0.1			
						7.3	0.6			
					Average	5.983333333	0.425			
					Standard Deviation	2.509557488	0.252712557			
2068		-52.6	-90.7	7.2		7.8	0.7	X		
			269.3			6.5	0.4			
						6.5	0.8			
						5.5	0.4			
						5.7	0.5			
						4.2	0.5			
						5.6	0.9			
						5.8	0.4			
						6.3	0.5			
						8	0.7			
						7	0.8			
						8.2	0.8			

				Average	6.425	0.616666667			
				Standard Deviation	1.178693421	0.185047087			
2069	-60.6	-95.0	7.9		12.2	2.3	X		
		265.0			9.5	1.1			
					5.2	0.7			
					3.1	0.2			
					3.9	0.4			
					4.4	0.4			
					3.1	0.3			
					6.6	0.5			
					9.5	1.8			
					8.3	0.7			
					9	1			
					10.5	1.6			
				Average	7.108333333	0.916666667			
				Standard Deviation	3.126560217	0.667196759			
2070	-62.7	-95.4	6.8		8.1	0.6	X		
		264.6			5.9	0.6			
					4.6	0.4			
					4.6	0.8			
					3.1	0.2			
					5.4	0.6			
					5.9	0.3			
					1.6	0.2			
					0.7	0.1			
					3.8	0.3			
					4.8	0.5			
					8.2	1.2			
				Average	4.725	0.483333333			
				Standard Deviation	2.259977876	0.30698929			
2071	-66.8	-94.4	8.5		1.3	0.1	X		
		265.6			12.1	4.3			
					4.5	0.3			

						3	0.3			
						1.9	0.3			
						0	0.2			
						1.8	0.1			
						1.6	0			
						3.2	0.4			
						1.5	0.2			
						5.2	0.3			
						0.9	0.1			
					Average	3.083333333	0.55			
					Standard Deviation	3.205345913	1.186668369			
2072		-67.2	-82.4	5.2		5.9	0.3	X		
			277.6			2.8	0.2			
						2	0.1			
						8.9	0.8			
						4.6	0.3			
						3.1	0.2			
						5.9	0.4			
						6.5	0.6			
						5	0.2			
						12.4	2.6			
						4.5	0.3			
						7.2	0.6			
					Average	5.733333333	0.55			
					Standard Deviation	2.86176466	0.677562476			
2073		-60.9	-86.0	8.5		4.6	0.4	X		
			274.0			2.6	0.3			
						1.3	0.2			
						3.7	0.2			
						3	0.3			
						5.6	0.6			
						10.7	1.2			
						7.7	0.8			
						8.7	1			

2076		-55.3	-82.6	12.5		6.8	0.7	X		
			277.4			5.3	0.7			
						6.1	0.6			
						4.1	0.5			
						4.3	0.58			
						5.8	0.8			
						5.9	0.7			
						2.9	0.5			
						1.6	0.2			
						4	0.5			
						6.2	0.5			
						7.7	0.7			
					Average	5.058333333	0.581666667			
					Standard Deviation	1.730716264	0.158506285			
2077		-51.2	-82.6	5.9		7.5	0.9	X		
			277.4			7.4	0.6			
						6	0.5			
						5.9	0.4			
						6.5	0.4			
						4.4	0.4			
						6.3	0.7			
						5.2	0.2			
						4.1	0.3			
						3.8	0.3			
						5	0.4			
						7.7	0.7			
					Average	5.816666667	0.483333333			
					Standard Deviation	1.338135292	0.203752672			
2078		-53.7	-82.8	21		7.7	0.8	X		
			277.2			9.1	1.2			
						9.3	1.1			
						6.4	0.5			
						3.8	0.3			
						5.5	0.3			

						6	0.5			
						2.9	0.2			
						5.3	0.3			
						9.9	1.2			
						8.9	0.7			
						10.3	1.8			
					Average	7.091666667	0.741666667			
					Standard Deviation	2.459659375	0.492596706			
2079		-47.8	-82.9	7.3		9.2	1	X		
			277.1			6.9	0.9			
						7.1	0.9			
						4.2	0.6			
						3.6	0.4			
						4.8	0.3			
						1.9	0.5			
						4.6	0.2			
						3.1	0.4			
						4	0.4			
						4.8	0.6			
						6.9	0.8			
					Average	5.091666667	0.583333333			
					Standard Deviation	2.050036955	0.262274434			
2080		-45.8	-88.2	13		7	0.7	X		
			271.8			8	0.7			
						5.4	0.4			
						3.8	0.3			
						0.5	0.2			
						1.8	0.2			
						2	0.2			
						2.5	0.3			
						2.4	0.3			
						3.6	0.3			
						7.7	0.7			
						7.2	0.9			

				Average	4.325	0.43333333			
				Standard Deviation	2.623711805	0.246182982			
2081	Graft	-42.5	-88.4	37.5	8.3	1.3	X		
			271.6		5.4	0.9			
					6.1	0.4			
					6	0.6			
					5	0.5			
					3.5	0.4			
					2.5	0.3			
					5.7	0.8			
					7.1	0.7			
					6.2	1.1			
					10.7	1.9			
					9.1	1.3			
				Average	6.3	0.85			
				Standard Deviation	2.278755641	0.475776877			
2082		-41.1	-86.0	19.8	5.1	0.8	X		
			274.0		8.9	0.8			
					5.5	0.6			
					5.4	0.5			
					3.8	0.5			
					3.8	0.8			
					0.4	0.5			
					3.5	0.6			
					4.4	0.7			
					3.2	0.4			
					7	0.5			
					6.5	1			
				Average	4.791666667	0.641666667			
				Standard Deviation	2.158475191	0.178164037			
2083		-42.9	-80.3	29.1	4.3	0.4	X		
			279.7		5.5	0.6			
					5.6	0.6			

						6.2	0.4			
						1.8	0.2			
						1.9	0.4			
						4.3	0.3			
						5.5	0.4			
						3.7	0.6			
						5.5	0.5			
						6.1	0.5			
						5.6	1.6			
					Average	4.666666667	0.541666667			
					Standard Deviation	1.516774888	0.355370059			
2084		-35.8	-80.1	11.2		8.2	0.8	X		
			279.9			6.6	0.7			
						3.8	0.7			
						5.7	0.6			
						4.4	0.6			
						4	0.5			
						6	0.5			
						4.4	0.6			
						4.7	0.6			
						5.9	0.6			
						6.6	0.6			
						7	0.7			
					Average	5.608333333	0.625			
					Standard Deviation	1.36412365	0.08660254			
2085		-35.7	-84.0	8		5.6	0.7	X		
			276.0			6.6	0.8			
						6.3	0.7			
						5.2	0.6			
						4.6	0.4			
						3.2	0.3			
						3.8	0.4			
						3.3	0.4			
						4.2	0.5			

2088	Petit	-27.7	-86.4	37.5		4.9	0.6	X		
			273.6			4.3	0.4			
						3.5	0.4			
						3.1	0.5			
						3.4	0.5			
						2.5	0.3			
						0.2	0.3			
						1.2	0.3			
						0.2	0.3			
						1.5	0.4			
						3.9	0.4			
						6.5	0.7			
				Average	2.933333333		0.425			
				Standard Deviation	1.910418009		0.128805703			
2089		-24.5	-88.8	7.8		0.8	0.3	X		
			271.2			0.9	0.2			
						0.3	0.2			
						1.3	0.2			
						1.4	0.3			
						2	0.3			
						2.4	0.5			
						1.4	0.4			
						2.5	0.6			
						2.8	0.3			
						1.2	0.3			
						1.5	0.2			
				Average	1.541666667		0.316666667			
				Standard Deviation	0.748888065		0.126730446			
2090		-26.4	-81.1	9.7		2.7	0.5	X		
			278.9			2.8	0.5			
						2.7	0.5			
						4.6	0.5			
						2.8	0.4			
						3.3	0.5			

						3.9	0.4			
						2.8	0.5			
						4.9	0.5			
						4	0.5			
						5.2	0.6			
						3.6	0.6			
					Average	3.608333333	0.5			
					Standard Deviation	0.91100178	0.060302269			
2091		-22.5	-80.6	11.2		4.8	0.2	X		
			279.4			2.8	0.4			
						1.7	0.3			
						0.7	0.2			
						1.6	0.2			
						3	0.4			
						4.7	0.5			
						2.8	0.4			
						4.2	0.3			
						2.5	0.4			
						3.2	0.4			
						2.9	0.3			
					Average	2.908333333	0.333333333			
					Standard Deviation	1.23543024	0.098473193			
2092		-18.4	-83.1	12.6		4.6	0.7	X		
			274.9			4.5	0.6			
						5	0.3			
						3.7	0.5			
						3.4	0.5			
						3.3	0.5			
						3.1	0.6			
						2.9	0.4			
						4	0.6			
						4.3	0.6			
						5.9	0.8			
						4.9	0.7			

				Average	4.13333333	0.56666667			
				Standard Deviation	0.89780878	0.13706883			
2093	-18.4	-85.9	14		1.6	0.5	X		
		276.9			0.9	0.4			
					1.4	0.4			
					1.3	0.4			
					1.2	0.5			
					1.3	0.4			
					2.9	0.5			
					2.1	0.4			
					3.8	0.6			
					2.7	0.6			
					0.5	0.2			
					2.6	0.5			
				Average	1.85833333	0.45			
				Standard Deviation	0.966209401	0.108711461			
2094	-14.5	-83.9	15.8		6.5	0.6	X		
		276.1			4.1	0.6			
					3.9	0.6			
					3.7	0.5			
					3.2	0.4			
					3.5	0.4			
					3.4	0.4			
					3.3	0.5			
					4.1	0.5			
					3.8	0.7			
					7	0.6			
					5.8	0.5			
				Average	4.35833333	0.525			
				Standard Deviation	1.309030407	0.09653073			
2095	-16.1	-89.6	11.3		3.6	0.5	X		
		270.4			3.2	0.5			
					3	0.5			

						3.4	0.7			
						2.2	0.3			
						2.3	0.4			
						2.3	0.2			
						2.1	0.3			
						2.6	0.3			
						1.9	0.4			
						2.9	0.4			
						3.1	0.4			
					Average	2.71666667	0.40833333			
					Standard Deviation	0.557320429	0.131137217			
2096		-11.6	-85.2	6.2		2.2	0.5	X		
			274.8			4.1	0.6			
						3.4	0.7			
						2.6	0.6			
						2	0.5			
						4	0.5			
						3.8	0.5			
						3.2	0.4			
						2.4	0.6			
						3.2	0.5			
						3.8	0.7			
						3	0.5			
					Average	3.14166667	0.55			
					Standard Deviation	0.71663143	0.090453403			
2097		-9.4	-82.4	8.7		6.3	0.9	X		
			277.6			8.3	0.9			
						7.7	0.7			
						6.9	0.7			
						7.1	0.9			
						6.8	0.7			
						6.2	0.6			
						5.4	0.7			
						6.1	0.9			

2100		-8.0	-89.7	12.9		2.5	0.4	X		
			270.3			3.3	0.5			
						2.9	0.4			
						2.6	0.5			
						3	0.3			
						2.4	0.3			
						2.6	0.3			
						2	0.4			
						2.5	0.4			
						3.9	0.3			
						3.3	0.4			
						2.3	0.5			
				Average		2.775	0.391666667			
				Standard Deviation		0.527644853	0.079296146			
2101		-5.9	-83.0	11.1		2.6	0.2	X		
			277.0			2.6	0.4			
						2.1	0.5			
						3.1	0.4			
						2.3	0.5			
						2.5	0.4			
						3.9	0.5			
						3.3	0.6			
						1.5	0.5			
						0.2	0.3			
						2.6	0.4			
						2.2	0.3			
				Average		2.408333333	0.416666667			
				Standard Deviation		0.927811044	0.111464086			
2102		-8.5	-76.3	10.7		3.9	0.6	X		
			283.7			4.2	0.4			
						3.6	0.6			
						3.2	0.5			
						4.7	0.5			
						3.4	0.6			

						2.8	0.5			
						3.1	0.7			
						3.7	0.5			
						4.9	0.5			
						5.2	0.5			
						4.2	0.6			
					Average	3.908333333	0.541666667			
					Standard Deviation	0.752521016	0.079296146			
2103		-5.8	-79.5	11.5		5.5	0.7	X		
			280.5			2.5	0.7			
						3.6	0.7			
						2.4	0.6			
						3.4	0.6			
						2.3	0.6			
						4	0.5			
						3.8	0.5			
						4	0.6			
						3	0.6			
						2.9	0.6			
						4	0.6			
					Average	3.45	0.608333333			
					Standard Deviation	0.909045453	0.066855792			
2104		-1.2	-70.8	14.3		3.8	0.6	X		
			289.2			3.7	0.4			
						2.9	0.5			
						3	0.6			
						4.3	0.5			
						4.3	0.5			
						4.7	0.4			
						4.6	0.4			
						4.2	0.5			
						4.5	0.5			
						3.3	0.5			
						3.5	0.5			

				Average	3.9	0.491666667			
				Standard Deviation	0.62377152	0.066855792			
2105	-5.4	-71.0	14.1		6.6	1	X		
		289.0			7.6	1.4			
					9	1.9			
					0.7	1.6			
					9.1	1.4			
					7.6	1			
					5.1	0.9			
					6	0.8			
					4.7	0.9			
					2.9	1			
					5.6	0.7			
					7.8	1.2			
				Average	6.058333333	1.15			
				Standard Deviation	2.479904079	0.358024885			
2106	-9.9	-70.8	13.1		5	0.7	X		
		289.2			5.5	0.7			
					4	0.7			
					5.3	0.5			
					3.8	0.7			
					3	0.7			
					0.1	0.5			
					4.3	0.6			
					4.1	0.7			
					3.7	0.8			
					5.6	0.7			
					4.8	0.6			
				Average	4.1	0.658333333			
				Standard Deviation	1.491186227	0.090033664			
2107	-15.0	-73.7	12.5		4.7	0.6	X		
		286.3			5.5	0.5			
					4.8	0.6			

						4.3	0.7			
						4.7	0.5			
						5.2	0.6			
						4.6	4.6			
						3.3	0.5			
						3.7	0.6			
						3.2	0.5			
						3.4	0.5			
						5.2	0.7			
					Average	4.383333333	0.908333333			
					Standard Deviation	0.798673142	1.16498797			
2108		-14.2	-72.4	17.3		1.8	0.5	X		
			287.6			3.5	0.7			
						4.1	0.5			
						2.4	0.6			
						3.1	0.5			
						1.3	0.5			
						2.4	0.6			
						2.4	0.4			
						1.6	0.6			
						1.8	0.5			
						2.9	0.6			
						1.3	0.2			
					Average	2.383333333	0.516666667			
					Standard Deviation	0.885061203	0.126730446			
2109		-14.3	-76.5	8.8		3.8	0.6	X		
			283.5			4.2	0.6			
						3.4	0.7			
						4.4	0.7			
						5.4	0.6			
						3.9	0.8			
						4.6	0.8			
						4.3	0.5			
						3.3	0.7			

2112		-24.0	-78.2	17.2		5	0.6	X		
			281.8			4.7	0.6			
						5.2	0.7			
						3.7	0.6			
						3.8	0.7			
						6.1	0.6			
						4	0.7			
						3.8	0.7			
						4.9	0.6			
						3.5	0.5			
						4.5	0.5			
						5.3	0.5			
					Average	4.541666667	0.608333333			
					Standard Deviation	0.79710651	0.079296146			
2113		-20.6	-70.8	14.1		5	0.8	X		
			289.2			3.4	0.6			
						3.2	0.7			
						3.2	0.5			
						3.5	0.7			
						3.8	0.6			
						1.7	0.6			
						2.6	0.5			
						2.9	0.5			
						1.4	0.1			
						3	0.4			
						3.6	0.5			
					Average	3.108333333	0.541666667			
					Standard Deviation	0.942393793	0.178164037			
2114		-26.9	-75.5	9.1		5.1	0.8	X		
			284.5			5.3	0.9			
						4.6	0.7			
						3.7	0.6			
						3.2	0.6			
						4.4	0.6			

						4.5	0.6			
						5.3	0.5			
						5.1	0.7			
						5	0.7			
						5.8	0.9			
						4.8	0.3			
					Average	4.733333333	0.658333333			
					Standard Deviation	0.72153036	0.167648622			
2115		-25.9	-72.4	7.2		2.2	0.6	X		
			287.6			2.8	0.5			
						2.3	0.4			
						1.9	0.4			
						2.2	0.4			
						2.6	0.4			
						3	0.5			
						2.1	0.5			
						2.9	0.6			
						2.8	0.6			
						2.6	0.8			
						4.4	0.7			
					Average	2.65	0.533333333			
					Standard Deviation	0.652965264	0.130267789			
2116		-26.9	-74.1	6.3		2.5	0.5	X		
			285.9			2.8	0.5			
						3.8	0.6			
						4.9	0.6			
						2.8	0.4			
						2.8	0.5			
						4	0.4			
						3.9	0.5			
						4.3	0.5			
						3.1	0.4			
						3.6	0.6			
						3.3	0.5			

				Average	3.48333333	0.5			
				Standard Deviation	0.724673385	0.073854895			
2117	-31.8	-73.0	7.2		4.5	0.7	X		
		287.0			5.8	1.1			
					4.2	0.6			
					4.6	0.4			
					4.1	0.5			
					2.8	0.7			
					4.4	0.5			
					4.7	0.6			
					5.5	0.7			
					6	0.8			
					5.2	0.6			
					4.5	0.7			
				Average	4.69166667	0.658333333			
				Standard Deviation	0.862826574	0.178164037			
2118	-35.0	-73.2	13.1		4.9	0.9	X		
		287.8			6.1	0.7			
					4.9	0.6			
					5	0.7			
					5.4	0.5			
					4.2	0.9			
					3.1	0.5			
					4.8	0.8			
					7	1.1			
					6.5	1.3			
					7	1.5			
					7.2	1.3			
				Average	5.50833333	0.9			
				Standard Deviation	1.267394129	0.333030165			
2119	-37.2	-77.1	14.1		6.1	1	X		
		282.9			7.5	0.9			
					6.7	0.9			

						5.8	0.6			
						7.1	1.2			
						7.9	1.3			
						4.9	0.6			
						6.7	1.2			
						4.9	0.9			
						3.7	0.6			
						4.9	0.8			
						6.8	1			
					Average	6.083333333	0.916666667			
					Standard Deviation	1.264072303	0.240580107			
2120		-34.1	-79.9	11.6		7.1	0.9	X		
			280.1			4.7	0.5			
						5.2	0.6			
						5.7	0.5			
						4.2	0.5			
						4.3	0.9			
						4.5	0.6			
						4.8	0.6			
						2.7	0.4			
						5.7	0.5			
						5.2	0.6			
						5.3	0.8			
					Average	4.95	0.616666667			
					Standard Deviation	1.058729942	0.164224532			
2121		-39.0	-70.2	9.8		8.8	1.1	X		
			289.9			8.6	1.2			
						5.4	0.8			
						5.2	0.7			
						4.4	0.5			
						6.1	0.5			
						5.4	0.7			
						4.2	0.4			
						6	0.7			

2124		-42.0	-77.2	12.5		5.6	0.7	X		
			282.8			5.9	0.7			
						5.3	0.6			
						4.2	0.6			
						3.1	0.4			
						2.7	0.3			
						2.1	0.3			
						4.3	0.4			
						4.4	0.6			
						5	0.6			
						5.7	0.8			
						5.5	0.7			
					Average	4.483333333	0.558333333			
					Standard Deviation	1.264791275	0.167648622			
2125		-49.7	-73.7	24.8		9.1	1.1	X		
			286.3			8.5	1.3			
						5.8	0.4			
						6.2	0.6			
						4.8	0.7			
						3.6	0.6			
						4.2	0.3			
						5	0.4			
						4.9	0.4			
						6.3	0.7			
						6.8	0.6			
						5.3	0.4			
					Average	5.875	0.625			
					Standard Deviation	1.641022409	0.301887998			
2126		-49.8	-79.1	5.1		10.5	1.5	X		
			280.9			8.6	1.1			
						8.5	0.7			
						4	0.3			
						3.4	0.2			
						3	0.2			

						1.7	0.4			
						2.1	0.1			
						4	0.3			
						7.8	0.9			
						8.9	1.1			
						9	0.8			
					Average	5.958333333	0.633333333			
					Standard Deviation	3.181611465	0.449915817			
2127		-53.3	-71.5	6.8		4.2	0.4	X		
			288.5			6.5	0.5			
						7.5	1.1			
						6.7	0.7			
						4.4	0.4			
						2.5	0.4			
						3.5	0.3			
						4.1	0.4			
						5.4	0.6			
						7.3	0.5			
						6.2	0.6			
						4.8	0.5			
					Average	5.258333333	0.533333333			
					Standard Deviation	1.590573558	0.210338832			
2128		-56.6	-70.7	9.3		6.1	0.5	X		
			289.3			8.9	1.8			
						4.1	0.4			
						5.1	0.5			
						7	0.6			
						4.9	0.3			
						3.8	0.2			
						3.2	0.2			
						4	0.4			
						4.8	0.7			
						5.7	0.7			
						5.4	0.4			

				Average	5.25	0.558333333			
				Standard Deviation	1.56292267	0.425245027			
2129		-55.5	-74.6	6.4	5.4	0.2	X		
			285.4		6.7	1			
					8.8	1.1			
					7.4	1			
					2.8	0.3			
					3.4	0.3			
					5	0.4			
					1.9	0.3			
					1.2	0.2			
					2.2	0.2			
					4.2	0.4			
					5.4	0.6			
				Average	4.533333333	0.5			
				Standard Deviation	2.349597	0.341121146			
2130		-53.8	-75.6	7.3	6.4	0.6	X		
			284.4		10.4	1.6			
					5.1	0.5			
					5.3	0.4			
					4.2	0.3			
					4	0.4			
					5.3	0.5			
					5.7	0.5			
					5	0.4			
					5.8	0.8			
					7.1	0.5			
					7.4	0.9			
				Average	5.975	0.616666667			
				Standard Deviation	1.727912561	0.3537676			
2131		-58.6	-77.8	13	8.1	1	X		
			282.2		8.1	0.9			
					6.7	0.5			

						2.7	0.2			
						3.9	0.2			
						2.7	0.2			
						1.5	0.1			
						4	0.3			
						2.1	0.3			
						1.9	0.3			
						4.2	0.3			
						5.5	0.5			
					Average	4.283333333	0.4			
					Standard Deviation	2.333484844	0.282842712			
2132		-60.7	-74.4	15.1		6.6	0.6	X		
			285.6			6.6	0.3			
						4	0.7			
						2.2	0.2			
						2.9	0.3			
						2.5	0.2			
						2.5	0.4			
						5.9	0.3			
						5.1	0.4			
						7	0.8			
						5.8	0.6			
						10.1	1.8			
					Average	5.1	0.55			
					Standard Deviation	2.378311089	0.44004132			
2133		-65.3	-79.2	8.3		7.5	1.2	X		
			280.8			16.2	5.3			
						12	2.5			
						3.2	0.3			
						0.4	0.1			
						2.4	0.4			
						2.3	0.3			
						3.4	0.4			
						10.7	1.8			

2136		-69.6	-69.1	9.1		7.5	0.5	X		
			290.9			6.3	0.7			
						5.4	0.4			
						6.3	0.4			
						8.2	0.9			
						5.4	0.5			
						3	0.2			
						5	0.6			
						5.3	0.2			
						6.7	0.7			
						6.6	0.6			
						6	0.5			
					Average	5.975	0.516666667			
					Standard Deviation	1.325364444	0.203752672			
2137		-64.6	-64.2	7		4.8	0.3	X		
			295.8			3.7	0.4			
						4.3	0.4			
						5.7	0.5			
						5	0.6			
						4	0.5			
						4.4	0.4			
						4.6	0.2			
						4.3	0.2			
						6.4	0.9			
						4.2	0.2			
						5.1	0.6			
					Average	4.708333333	0.433333333			
					Standard Deviation	0.757337841	0.20597146			
2138		-62.3	-67.7	8.7		3.8	0.2	X		
			292.3			5.4	0.7			
						3.6	0.3			
						1.9	0.2			
						3.7	0.4			
						3.3	0.2			

						2	0.2			
						3.5	0.4			
						3.3	0.2			
						8.1	1.5			
						5.4	0.6			
						4.5	0.3			
					Average	4.041666667	0.433333333			
					Standard Deviation	1.675740451	0.374974747			
2139		-60.4	-65.5	14.5		3.2	0.5	X		
			294.5			5.3	0.4			
						7.3	0.9			
						6.8	0.4			
						4.4	0.6			
						5.6	0.4			
						7.1	0.6			
						5.9	0.5			
						5.3	0.5			
						5.5	0.4			
						3.1	0.3			
						1.8	0.3			
					Average	5.108333333	0.483333333			
					Standard Deviation	1.701581261	0.164224532			
2140		-56.9	-62.1	10.4		8.3	0.9	X		
						6.8	0.5			
						7.6	0.7			
						6.3	0.6			
						3.9	0.5			
						7.1	0.4			
						6.6	0.8			
						5.2	0.4			
						5.6	0.4			
						6.9	0.5			
						7.5	0.8			
						7.6	0.6			

				Average	6.616666667	0.591666667			
				Standard Deviation	1.221648166	0.172986249			
2141	-54.2	-62.5	21.6		8.9	0.5	X		
		297.5			7.5	0.7			
					12.3	1.6			
					8.4	1			
					7.3	0.4			
					3.9	0.4			
					5.8	0.3			
					5.6	0.3			
					6	0.4			
					4.1	0.8			
					6.7	0.4			
					7.4	0.5			
				Average	6.991666667	0.608333333			
				Standard Deviation	2.269745013	0.377692355			
2142	-51.1	-65.0	14.4		8	0.6	X		
		295.0			7	0.4			
					6.8	0.4			
					8.6	0.8			
					3	0.5			
					5.6	0.6			
					6.1	0.6			
					6.7	0.4			
					7.7	0.5			
					7.8	0.8			
					7.9	1			
					7.7	0.5			
				Average	6.908333333	0.591666667			
				Standard Deviation	1.5011864	0.188092498			
2143	-55.1	-70.0	6.3		4.9	0.5	X		
		290.0			4.8	0.3			
					6.4	0.6			

						6.3	0.2			
						6.1	0.3			
						4.9	0.4			
						3.9	0.4			
						3.3	0.3			
						3.9	0.3			
						4.6	0.6			
						3.9	0.4			
						4.3	0.3			
					Average	4.775	0.383333333			
					Standard Deviation	1.02169645	0.126730446			
2144		-58.5	-64.3	7.5		8.4	0.6	X		
			299.0			9.9	1.3			
						7.4	0.5			
						3.1	0.5			
						3.4	0.4			
						1.7	0.3			
						2.1	0.2			
						1.7	0.3			
						2.1	0.2			
						2.3	0.2			
						3	0.3			
						6.3	0.5			
					Average	4.283333333	0.441666667			
					Standard Deviation	2.906367096	0.302890119			
2145		-47.5	-61.0	12.3		9.3	0.6	X		
			299.0			8.1	0.7			
						10.6	0.7			
						7.7	0.6			
						4	0.4			
						5	0.4			
						6.3	0.4			
						9	0.7			
						10.4	0.8			

2148		-50.0	-67.6	9.9		11.8	0.6	X		
			292.4			7.7	1			
						6.8	0.3			
						5.4	0.4			
						3.6	0.2			
						4.1	0.2			
						4	0.2			
						5.2	0.4			
						2.8	0.7			
						4.2	0.4			
						7.2	0.7			
						7.3	0.7			
				Average		5.841666667	0.483333333			
				Standard Deviation		2.483567205	0.255247948			
2149		-40.3	-64.5	9		9.7	1.4	X		
			295.5			4.8	0.5			
						10.4	0.6			
						11.4	0.8			
						9	0.6			
						6.6	0.6			
						9.3	0.8			
						7.4	0.4			
						7.7	0.6			
						9.6	1			
						7.9	0.6			
						9.4	0.8			
				Average		8.6	0.725			
				Standard Deviation		1.803027757	0.266714011			
2150		-37.6	-76.1	8.4		7	0.9	X		
			293.9			7.8	0.9			
						7.2	0.7			
						6.3	0.7			
						6.1	0.8			
						5.1	0.5			

						5.4	0.7			
						5.4	0.6			
						6.4	0.7			
						6.5	0.7			
						7.4	0.8			
						7.9	0.9			
					Average	6.541666667	0.741666667			
					Standard Deviation	0.942393793	0.124011241			
2151		-37.2	-62.5	27.2		10.3	1.3	X		
			297.5			8.4	1			
						7.6	0.6			
						6.6	0.6			
						7.2	0.7			
						6.1	0.6			
						6.2	0.7			
						7.1	0.8			
						6.5	0.8			
						7.5	0.8			
						8.5	1.1			
						10.6	1.2			
					Average	7.716666667	0.85			
					Standard Deviation	1.489864749	0.243086217			
2152		-34.1	-68.7	7.5		7.5	0.9	X		
			291.3			7.1	1.1			
						6.7	1			
						5.7	0.7			
						5.5	0.6			
						3.9	0.9			
						4.5	0.7			
						5.7	1			
						7	1.9			
						7	1.1			
						6.8	1.1			
						6.5	0.9			

				Average	6.158333333	0.991666667			
				Standard Deviation	1.113110575	0.331548251			
2153	-35.8	-60.8	9.8		7.5	0.9	X		
		299.2			5.4	0.6			
					5.8	0.6			
					6.9	0.6			
					5.2	0.7			
					5	0.5			
					4.9	0.6			
					4.4	0.4			
					6.2	0.7			
					6.7	0.9			
					7.7	0.8			
					8.6	0.7			
				Average	6.191666667	0.666666667			
				Standard Deviation	1.300669991	0.149747262			
2154	-32.1	-63.1	6.9		5.6	0.6	X		
		296.6			6.6	1			
					6.9	1.1			
					4.4	0.7			
					4.7	0.7			
					5.5	0.9			
					7.2	0.7			
					6.9	0.7			
					6.7	0.9			
					6.9	0.8			
					5.6	0.6			
					7.7	1.2			
				Average	6.225	0.825			
				Standard Deviation	1.036712461	0.195982374			
2155	-29.6	-66.0	11.2		5.4	0.7	X		
		294.0			5.4	0.6			
					6.2	0.6			

						4.6	0.6			
						4.4	0.6			
						4.9	0.7			
						6.5	0.8			
						6.5	0.9			
						6.9	0.8			
						6.2	0.8			
						6.5	0.8			
						6.4	0.7			
					Average	5.825	0.716666667			
					Standard Deviation	0.846516928	0.10298573			
2156		-24.6	-63.5	19.6		5.8	0.7	X		
			296.5			6	0.7			
						4.9	0.6			
						5.3	0.5			
						4.5	0.4			
						5.4	0.5			
						4.2	0.4			
						2.8	0.3			
						4.4	0.5			
						4	0.3			
						4	0.4			
						6.2	0.5			
					Average	4.791666667	0.483333333			
					Standard Deviation	0.995862653	0.133711585			
2157		-24.2	-67.0	28		5.1	0.6	X		
			293.0			4.1	0.5			
						3.7	0.4			
						3.9	0.4			
						3.4	0.4			
						2.8	0.4			
						4.7	0.4			
						3.2	0.5			
						5.1	0.6			

2160	de Vico	-19.8	-60.1	18.6		6	0.8	X		
			299.9			7.2	0.7			
						7.8	0.8			
						7	0.7			
						5.2	0.6			
						5.4	0.7			
						5.9	0.7			
						5.5	0.6			
						6.1	0.6			
						6.2	0.7			
						6.6	0.6			
						6.8	0.6			
					Average	6.308333333	0.675			
					Standard Deviation	0.789082705	0.075377836			
2161		-16.0	-62.5	24.4		7.5	0.8	X		
			297.5			7.9	0.8			
						7.4	0.9			
						8.3	0.8			
						7	0.8			
						5.8	0.6			
						4.5	0.7			
						5.2	0.8			
						5.5	0.5			
						3.9	0.5			
						5.1	0.7			
						6.6	0.8			
					Average	6.225	0.725			
					Standard Deviation	1.422625614	0.128805703			
2162		-14.4	-62.8	6.3		5.1	0.9	X		
			297.2			6.1	0.6			
						6.2	0.7			
						6.5	0.7			
						6.3	0.7			
						5.9	0.8			

						6.1	0.6			
						6.8	0.7			
						5.8	0.7			
						4.7	0.8			
						5.9	0.6			
						4.4	0.7			
					Average	5.81666667	0.708333333			
					Standard Deviation	0.723417814	0.090033664			
2163		-14.2	-64.2	8.9		6.2	0.8	X		
			295.8			6.7	0.9			
						6	0.8			
						7.5	0.7			
						5.2	0.8			
						5.7	0.7			
						5.4	0.6			
						5.3	0.7			
						6.8	0.9			
						5.7	0.8			
						7.9	1			
						6.9	0.9			
					Average	6.275	0.8			
					Standard Deviation	0.884333339	0.112815215			
2164		-10.8	-67.8	5.5		5	0.7	X		
			292.2			4.1	0.6			
						5.9	0.6			
						5.5	0.5			
						6.4	0.5			
						3.8	0.7			
						5.7	0.5			
						3.3	0.6			
						5.5	0.7			
						5.8	0.4			
						6.4	0.6			
						6.1	0.6			

				Average	5.291666667	0.583333333			
				Standard Deviation	1.030849899	0.093743687			
2165	-3.7	-64.2	14		5.6	0.9			
					8.7	1			
					8.2	1.2			
					6.2	1			
					5.7	1.1			
					6.6	1.2			
					7.1	1			
					6.9	1.1			
					6.4	0.7			
					4.5	0.9			
					6.5	1.1			
					5.8	0.9			
				Average	6.516666667	1.008333333			
				Standard Deviation	1.14004253	0.144337567			
2166	-0.8	-62.5	10.5		10.8	2		X	
		297.5			7.8	1.7			
					10.1	2.4			
					10.8	2.2			
					7.6	1.6			
					5.7	0.8			
					9.9	2.3			
					10.3	2.6			
					8	2.2			
					10	2			
					7.8	1.4			
					4.5	1.2			
				Average	8.608333333	1.866666667			
				Standard Deviation	2.052253012	0.53654337			
2167	-2.7	-61.3	9.2		9.4	2.7		X	
		298.7			8.8	2.3			
					9.1	2			

						8	1.8			
						7.9	1.8			
						9.4	2.7			
						9.2	1.9			
						6.9	1.8			
						7.1	1.8			
						8.5	2.1			
						6.9	1.5			
						8.7	2.2			
					Average	8.325	2.05			
					Standard Deviation	0.949760735	0.370503343			
2168		-2.9	-69.0	22.9		8.3	1.3	X		
			291.0			7.6	1.2			
						5.5	0.7			
						5	0.7			
						4.9	0.5			
						2.5	0.5			
						5.3	0.4			
						5	0.6			
						4.7	0.5			
						5.6	0.5			
						6.3	0.6			
						3.9	0.7			
					Average	5.383333333	0.683333333			
					Standard Deviation	1.53257557	0.282306517			
2169		-6.4	-64.5	12		3	0.5	X		
			296.5			3.1	0.5			
						2.9	0.5			
						2.6	0.5			
						3.2	0.5			
						3.1	0.5			
						1.6	0.4			
						1.5	0.7			
						1.6	0.5			

2172		-4.6	-59.1	10		15.6	7		X	
			300.9			14.3	5.7			
						14.2	4.9			
						12	4			
						12.5	4.2			
						13.3	4.8			
						12.7	4.2			
						12.9	4.6			
						12.4	3.9			
						11.7	3.1			
						12.1	3.6			
						11.4	3.4			
					Average	12.925	4.45			
					Standard Deviation	1.231499456	1.074074655			
2173	Billy	-13.8	-50.0	45		12.3	2.8		X	
			310.0			10.2	2			
						12	2.4			
						12.4	2.7			
						12.6	3.1			
						11.8	3			
						12.7	3.1			
						13.1	2.6			
						11.8	3			
						12	3			
						12.1	2.1			
						12.5	1.9			
					Average	12.125	2.641666667			
					Standard Deviation	0.720006313	0.442016728			
2174		-13.6	-59.9	11.7		5.2	0.5		X	
			300.1			4.5	0.4			
						4	0.3			
						6.6	0.5			
						4.1	0.4			
						5.7	0.5			

						4.6	0.3			
						4.6	0.4			
						4.7	0.5			
						5.3	0.5			
						4.8	0.3			
						5.5	0.3			
					Average	4.966666667	0.408333333			
					Standard Deviation	0.734021715	0.090033664			
2175		-17.8	-58.6	8.9		7.2	1	X		
			301.4			5.5	1.1			
						7.7	1			
						7.7	0.8			
						6.1	0.8			
						6.3	0.8			
						6.3	1			
						7.6	1			
						7.4	0.9			
						7.4	1			
						7.2	1.2			
						7.2	0.9			
					Average	6.966666667	0.958333333			
					Standard Deviation	0.726552674	0.124011241			
2176		-17.2	-53.3	6		7.2	0.9	X		
			306.7			6.3	0.8			
						5.5	0.6			
						6.6	0.7			
						5.3	0.6			
						5.4	0.8			
						4.9	0.7			
						4.5	0.8			
						5.2	0.8			
						6.8	0.8			
						6.4	0.9			
						6.1	0.6			

				Average	5.85	0.75			
				Standard Deviation	0.832848344	0.108711461			
2177	-21.1	-51.4	14		8.7	1	X		
		308.6			10.4	0.8			
					8.2	0.7			
					7.7	1			
					8.2	0.9			
					8.8	0.9			
					9.1	1.3			
					8.8	1.1			
					7.7	1			
					7.4	0.9			
					8.1	1			
					7.4	0.9			
				Average	8.375	0.958333333			
				Standard Deviation	0.855065122	0.150504203			
2178	-27.1	-52.4	11.1		4.4	0.5	X		
		307.6			5	0.5			
					4.3	0.5			
					3.9	0.4			
					4.5	0.5			
					4	0.5			
					4.1	0.5			
					3.3	0.4			
					3.5	0.4			
					4.9	0.5			
					3.1	0.4			
					5.2	0.4			
				Average	4.183333333	0.458333333			
				Standard Deviation	0.668557923	0.051492865			
2179	-28.6	-51.8	12.8		5.7	0.7	X		
		308.2			4.5	0.8			
					6.3	0.7			

						5.6	0.8			
						4.6	0.7			
						2.7	0.5			
						1.1	0.3			
						0.7	0.4			
						1.2	0.3			
						1.8	0.3			
						0.6	0.3			
						2.4	0.4			
					Average	3.1	0.516666667			
					Standard Deviation	2.119605452	0.2081666			
2180		-23.4	-58.7	6.6		4.4	0.6	X		
			301.3			5	0.5			
						4.7	0.6			
						4.2	0.5			
						5	0.6			
						4	0.6			
						3.8	0.6			
						4.4	0.6			
						4.7	0.6			
						3.4	0.4			
						4.9	0.6			
						3.2	0.3			
					Average	4.308333333	0.541666667			
					Standard Deviation	0.606717447	0.099620492			
2181		-23.3	-54.9	9.8		6.5	0.9	X		
			305.1			6.6	0.9			
						7.7	1			
						5.5	0.8			
						7.1	0.7			
						5.6	0.6			
						5.8	0.1			
						6.3	0.7			
						6.1	0.7			

2184		-38.7	-57.5	12.1		8.6	0.7	X		
			302.5			7.4	0.7			
						9.5	1			
						7.3	0.4			
						7.7	0.7			
						6.1	0.7			
						5.5	0.5			
						5.9	0.6			
						7.9	0.7			
						7.3	0.6			
						9.3	0.9			
						8.9	0.7			
					Average	7.61666667	0.683333333			
					Standard Deviation	1.31621588	0.158592292			
2185		-39.0	-50.8	7.6		10.8	1.4	X		
			309.2			10.3	4.7			
						9.8	4.2			
						7.3	0.6			
						7.2	1			
						4	0.5			
						6.3	0.8			
						4.4	0.6			
						5.7	0.6			
						8.1	1.1			
						12.1	2.2			
						11.3	2.1			
					Average	8.108333333	1.65			
					Standard Deviation	2.733781375	1.428603896			
2186		-33.5	-56.3	9.6		6.9	0.8	X		
			303.7			8.2	1			
						7.7	0.8			
						7.1	0.6			
						6.3	0.7			
						6.8	0.6			

						8.8	1.1			
						7.4	0.9			
						7.6	1.1			
						7.9	1.4			
						7.5	0.8			
						7.8	0.3			
					Average	7.5	0.841666667			
					Standard Deviation	0.670142454	0.287491765			
2187		-40.7	-52.1	12.5		9.4	0.8	X		
			307.9			11.1	0.8			
						7.7	0.7			
						8.7	0.8			
						9.1	0.5			
						9.9	0.7			
						8.4	0.8			
						7.1	0.7			
						10.9	0.7			
						8.8	0.8			
						8.7	0.7			
						9.5	0.8			
					Average	9.108333333	0.733333333			
					Standard Deviation	1.167326653	0.088762536			
2188		-41.1	-58.4	13.4		10.4	1	X		
			301.6			10.3	0.6			
						10.2	1.1			
						10.5	1			
						8.1	0.8			
						8.9	0.9			
						8.5	0.8			
						8.6	0.9			
						6.5	0.7			
						10.6	1.2			
						10.7	1.3			
						10.6	0.9			

				Average	9.491666667	0.933333333			
				Standard Deviation	1.346009816	0.201509455			
2189	-43.1	-58.7	10.9		10	1.3	X		
		301.3			10	0.9			
					8.7	1			
					9	1.2			
					10	1			
					8.4	0.5			
					9.7	0.6			
					8.2	0.7			
					9.6	0.8			
					9.5	0.8			
					9.8	1			
					8.4	0.6			
				Average	9.275	0.866666667			
				Standard Deviation	0.692984324	0.246182982			
2190	-47.2	-58.9	22.1		11.2	0.8	X		
		301.1			11.5	1.3			
					11.2	1.1			
					11.3	0.8			
					9.3	0.8			
					9.6	0.8			
					10.9	0.7			
					7.6	0.4			
					8.4	0.4			
					9.1	0.9			
					6.2	0.5			
					11.1	1.1			
				Average	9.783333333	0.8			
				Standard Deviation	1.718790977	0.279610118			
2191	-48.8	-56.4	9.5		8.9	0.8	X		
		303.6			8.2	0.5			
					7.5	0.5			

						7.7	0.4			
						7.9	0.5			
						8.1	0.5			
						7.9	0.6			
						7.8	0.5			
						8	0.6			
						9.8	1.2			
						9.4	0.7			
						10.1	1.3			
					Average	8.441666667	0.675			
					Standard Deviation	0.880555954	0.28959219			
2192		-50.4	-56.4	6.8		10.9	0.6		X	
			303.6			11.2	0.7			
						11.7	0.8			
						10.6	0.5			
						12	0.5			
						11	0.5			
						11.1	0.5			
						11	0.7			
						10.6	0.7			
						10.7	0.7			
						10.4	0.5			
						11.1	0.7			
					Average	11.025	0.616666667			
					Standard Deviation	0.459495771	0.111464086			
2193		-53.3	-51.4	7.8		11.6	0.9		X	
			308.6			11	0.9			
						11.9	1.2			
						11.8	1			
						10.9	0.6			
						9.6	0.6			
						9.3	0.5			
						8.6	0.4			
						8.7	0.3			

2196		-60.1	-56.2	8.2		3.6	0.5	X		
			303.8			5.2	0.4			
						3.8	0.3			
						4.4	0.4			
						4.7	0.5			
						2.1	0.2			
						0.7	0.1			
						1.6	0.2			
						1.4	0.2			
						1.6	0.2			
						8	1			
						4.9	0.4			
					Average	3.5	0.366666667			
					Standard Deviation	2.107993445	0.238683257			
2197		-69.3	-53.5	9.5		4.7	0.2	X		
			306.5			7.1	0.7			
						7.8	0.2			
						5.6	1			
						4.1	0.4			
						5	0.4			
						3.2	0.4			
						10.8	1.8			
						6.6	0.5			
						4.6	0.3			
						8.4	1.1			
						5.3	0.1			
					Average	6.1	0.591666667			
					Standard Deviation	2.137117855	0.490747729			
2198		-63.4	-53.0	5.8		7.1	0.2	X		
			307.0			6.4	0.3			
						6.5	0.3			
						6.4	0.6			
						6.2	0.2			
						9.7	1.7			

						7.4	0.7			
						8	1.1			
						7.8	0.8			
						7.2	0.4			
						7.4	0.4			
						7.5	0.3			
					Average	7.3	0.583333333			
					Standard Deviation	0.957268842	0.444835686			
2199		-67.5	-59.7	6.5		10	1.5	X		
			300.3			12.9	4.8			
						15.2	6.2			
						5.9	0.7			
						2.3	0.2			
						2.1	0.2			
						1.1	0.2			
						1.5	0.2			
						0.9	0.3			
						1.6	0.2			
						6.1	0.5			
						7.9	0.6			
					Average	5.625	1.3			
					Standard Deviation	4.942602369	2.019000653			
2200		-67.7	-52.1	6.1		10.8	1.7	X		
			307.9			11.3	7.8			
						6	0.3			
						2.5	0.2			
						2.8	0.2			
						3.2	0.2			
						5.2	0.2			
						5.5	0.9			
						5.7	0.5			
						8.8	1			
						13.5	3.9			
						2.5	0.2			

				Average	6.483333333	1.425			
				Standard Deviation	3.76559384	2.27481268			
2201	-63.6	-50.8	27.1		7.8	0.1	X		
		309.2			5.6	0.2			
					8.2	0.4			
					11.2	0.7			
					9.8	0.4			
					5.7	0.1			
					5.4	0.2			
					7.4	0.6			
					8.1	0.4			
					6.5	0.5			
					7.5	0.4			
					10.5	1.3			
				Average	7.808333333	0.441666667			
				Standard Deviation	1.908096783	0.328794861			
2202	-69.2	-49.9	19.3		4.4	0.4	X		
		310.1			8.3	0.9			
					6.4	0.5			
					4.6	0.4			
					0.4	0.1			
					0.3	0.1			
					3.6	0.3			
					6.8	0.6			
					5.6	0.4			
					5.4	0.4			
					7.1	0.6			
					5.2	0.5			
				Average	4.841666667	0.433333333			
				Standard Deviation	2.458550324	0.218812221			
2203	-65.2	-42.9	13		5.3	0.4	X		
		317.1			6.6	0.6			
					5.1	0.3			

						2.1	0.1			
						3.6	0.3			
						4.5	0.5			
						3.3	0.4			
						5.6	0.4			
						4.2	0.3			
						5.1	0.5			
						5	0.3			
						4.5	0.5			
					Average	4.575	0.383333333			
					Standard Deviation	1.177921899	0.133711585			
2204		-65.0	-46.2	9.5		8.5	0.5	X		
			313.8			13.6	1.8			
						9	1.7			
						5.1	0.4			
						4.7	0.3			
						2.8	0.4			
						6.4	0.5			
						5.2	0.4			
						6	0.7			
						4	0.3			
						6.6	0.8			
						2.4	0.1			
					Average	6.191666667	0.658333333			
					Standard Deviation	3.066374327	0.541812335			
2205		-69.6	-40.8	7.8		8.3	0.9	X		
			319.2			5.9	0.3			
						11.5	2.7			
						10	2.2			
						4.2	0.3			
						3.9	0.4			
						3	0.2			
						0.7	0.1			
						1.2	0.2			

2208		-57.0	-42.1	11.1		9.5	0.9		X	
			-317.9			9.3	0.6			
						10.5	1.2			
						9.5	0.7			
						9.1	0.6			
						12.1	1.1			
						10.7	0.6			
						10.9	0.8			
						9.7	0.7			
						11	1.3			
						11.5	1.5			
						9.4	0.5			
				Average		10.2666667	0.875			
				Standard Deviation		0.981958464	0.325087401			
2209		-58.7	-48.2	7.6		8.1	0.9		X	
			311.8			6.7	0.4			
						6.5	0.7			
						6.5	0.6			
						4.3	0.5			
						5.5	0.3			
						6.1	0.4			
						5.9	0.4			
						4	0.2			
						5.6	0.4			
						4.8	0.3			
						8.6	0.6			
				Average		6.05	0.475			
				Standard Deviation		1.378075074	0.195982374			
2210		-53.6	-43.4	5.5		8.5	1		X	
			316.6			10.9	1.8			
						9.7	1.3			
						6.4	0.8			
						8	0.9			
						6.3	0.8			

						5.3	0.6			
						6.3	0.8			
						7.9	0.8			
						9.3	1.2			
						9.2	1			
						7.7	0.9			
					Average	7.958333333	0.991666667			
					Standard Deviation	1.662122593	0.317542648			
2211		-52.7	-47.2	6.5		11.5	1.1		X	
			312.8			13.5	0.9			
						13.6	1.6			
						12	1.2			
						10.6	0.8			
						11.6	0.6			
						12.7	1			
						13	0.7			
						13.1	1.3			
						13.5	1.4			
						13.2	1.5			
						13.6	1.3			
					Average	12.658333333	1.116666667			
					Standard Deviation	0.996775103	0.321455025			
2212		-48.6	-47.8	15.8		12.3	1.3		X	
			312.2			13.1	1.3			
						12.6	1.9			
						12.6	1.2			
						11.7	1.5			
						11.4	1.3			
						10.1	1.1			
						8.2	0.6			
						10.1	0.8			
						11.9	1.2			
						12.8	1.5			
						13.4	1.6			

				Average	11.68333333	1.275			
				Standard Deviation	1.523651913	0.346738046			
2213	-48.3	-41.0	9.5		11.7	1	X		
		319.0			11.7	1.8			
					11	1.6			
					9.2	1			
					9.6	1.1			
					9.5	1.2			
					8.6	1			
					10.3	1.3			
					9.4	1.2			
					12.7	1.4			
					12.1	1.6			
					11.8	1.2			
				Average	10.63333333	1.283333333			
				Standard Deviation	1.360703918	0.26571801			
2214	-46.3	-40.8	10		9.3	2.7	X		
		319.2			7.2	1.2			
					8.9	1.2			
					9.4	0.9			
					6.2	1			
					8.1	0.9			
					8.2	1.3			
					9.2	1.2			
					9.4	1.1			
					9.3	1.2			
					11.4	2			
					11.6	2.5			
				Average	9.016666667	1.433333333			
				Standard Deviation	1.525440821	0.615457455			
2215	-44.1	-46.4	10.7		10.1	1	X		
		313.6			11.5	1.4			
					11.5	1.5			

Mixed terrane _ borderline situation						10.4	1.6			
t to decide into which category to place it.						10.9	1.1			
						8.2	0.8			
						5.9	0.6			
						10.7	0.7			
						9.4	0.9			
						11	1.1			
						10.8	0.9			
						11.5	1.2			
					Average	10.15833333	1.06666667			
					Standard Deviation	1.65059677	0.314305391			
2216		-41.3	-41.3	8.6		8.5	0.6	X		
			318.7			7.8	0.7			
						8.2	0.7			
						6.8	0.7			
						7.8	0.4			
						6	0.9			
						4.5	0.8			
						7.6	0.9			
						7.1	0.9			
						8.9	1.5			
						7.7	0.9			
						8.3	1			
					Average	7.43333333	0.83333333			
					Standard Deviation	1.212310591	0.267423169			
2217		-33.2	-40.8	19.1		6.8	1.2	X		
			319.2			9.3	1.5			
						10.9	1.4			
						10.5	2			
						10.4	1.9			
						8.5	1.2			
						7.8	1.1			
						7.3	1			
						8.4	1.1			

2220		-32.3	-48.3	19.5		5.7	0.9	X		
			311.7			4.7	0.8			
						5	0.6			
						2.4	0.3			
						3.1	0.4			
						2.6	0.4			
						2	0.3			
						3	0.4			
						2.2	0.4			
						2.9	0.4			
						5.5	0.7			
						4.7	1			
				Average		3.65	0.55			
				Standard Deviation		1.362817936	0.243086217			
2221		-30.3	-43.9	8.1		12.2	2.4	X		
			316.1			13.2	2.6			
						13.6	2.6			
						12	2.1			
						12	2.4			
						11.7	1.7			
						12	1.8			
						14.2	2.2			
						13.2	0.9			
						12.2	1.7			
						11.2	1.7			
						12.4	2.4			
				Average		12.49166667	2.041666667			
				Standard Deviation		0.871214756	0.499924237			
2222		-26.3	-47.2	11		9.9	2.1	X		
			312.8			5.8	1			
						6.4	11			
						7.9	1.4			
ine situation between Highland and Maria						8.5	1.4			
						6.7	1.3			

						8.8	1.6			
						6.1	1.2			
						4.7	0.8			
						9	2.4			
						5.5	1			
						6.1	0.9			
					Average	7.11666667	2.175			
					Standard Deviation	1.640306697	2.819775942			
2223		-22.5	-45.9	10		10.8	1.6		X	
			314.1			12	2.1			
						9	1.6			
						7.2	0.9			
						9.5	1.5			
						10.6	1.6			
						8.2	1.6			
						8.7	1.1			
						8.4	1.5			
						7.3	1.7			
						9.5	1.6			
						9.9	1.6			
					Average	9.258333333	1.533333333			
					Standard Deviation	1.431120561	0.296443566			
2224		-24.5	-41.0	5.3		15.3	1.7		X	
			319.0			16.4	5.1			
						16.6	6.1			
						16.9	6.7			
						16.3	4.9			
						16.7	5.3			
						16.8	6.9			
						15.9	2.4			
						17.3	7.7			
						16.7	7.8			
						17.1	6.1			
						16.7	5.3			

				Average	16.55833333	5.5			
				Standard Deviation	0.538446137	1.880522171			
2225	-29.2	-48.4	14		4	1	X		
		311.6			5.4	0.6			
					5.5	1			
					5.4	0.8			
					10	1.1			
					4.6	0.7			
					5.2	0.8			
					6.8	0.9			
					2.3	0.7			
					3.3	0.7			
					2.4	0.4			
					2.7	0.6			
				Average	4.8	0.775			
				Standard Deviation	2.169205971	0.200567377			
2226	-29.2	-44.5	5.3		5.5	1	X		
		315.5			4.2	1.1			
					5	1.3			
					4	0.8			
					3.1	0.6			
					3.9	0.7			
					3.1	0.5			
					3.6	0.7			
					4.1	0.9			
					3.5	0.8			
					5.2	0.9			
					6.8	1.1			
				Average	4.333333333	0.866666667			
				Standard Deviation	1.09903539	0.230940108			
2227	-19.8	-45.8	13.4		4	0.6	X		
		314.2			4.8	0.5			
					2.3	0.5			

						3.9	0.8			
						3.4	0.7			
						2.5	0.5			
						1.4	0.5			
						1.6	0.4			
						1.4	0.4			
						0.6	0.4			
						1.4	0.4			
						5.4	0.8			
					Average	2.725	0.541666667			
					Standard Deviation	1.543387655	0.150504203			
2228		-14.8	-48.1	12		10.7	1.5		X	
			311.9			10.2	1.6			
						8.8	1.2			
						9.1	1.1			
						9.1	1.4			
						8.3	1.3			
						9	1.7			
						9.4	1.8			
						9.5	1.4			
						12	2.4			
						13.4	2.7			
						13.1	2			
					Average	10.21666667	1.675			
					Standard Deviation	1.724071995	0.484533515			
2229		-18.4	-43.4	9.3		3.4	1.4		X	
			316.6			5	1.4			
						4.8	1.4			
						3.5	1.2			
						2.7	1			
						1.3	1.1			
						1.3	1.3			
						3.4	1			
						2.5	0.9			

2232		-7.9	-42.8	11.1		16.9	7.6		X	
			317.2			17.4	7.5			
						17.7	9			
Southern Oceanus Procellarum						18.2	9.4			
						18	8.6			
						17.5	8.7			
						16.8	6.9			
						16.8	6.8			
						18.6	10.2			
						18.5	8.5			
						18.4	9.1			
						17.8	8.8			
				Average		17.71666667	8.425			
				Standard Deviation		0.652036437	1.02879011			
2233		-9.3	-45.9	7.8		16.1	4.9		X	
			314.1			16.1	4.6			
						16.2	5			
						15.4	4.2			
						13.8	4.3			
						13.9	3.2			
						12.7	3.7			
						14.5	5.2			
						15.8	4.9			
						15.4	4.3			
						16.3	5			
						14.5	4.1			
				Average		15.05833333	4.45			
				Standard Deviation		1.164207365	0.599241945			
2234		-5.5	-46.1	9		16	4.5		X	
			313.9			15.9	3.8			
						15.8	3.9			
						16.1	4.2			
						15.7	4.7			
						15.8	4.7			

						16.3	4.8			
						14.5	3.7			
						14.3	3.8			
						15.3	4.8			
						15.6	4.9			
						16.1	4.1			
					Average	15.61666667	4.325			
					Standard Deviation	0.62643774	0.455521679			
2235		-4.5	-44.2	20.3		18.1	8		X	
			315.8			17.9	6.6			
						17.3	6.7			
						18.1	6.8			
						18.3	8			
						18.1	6.7			
						18.2	10.7			
						17.9	8			
						17.3	6.9			
						17.7	7.6			
						17.9	7.7			
						17.9	7.4			
					Average	17.89166667	7.591666667			
					Standard Deviation	0.320392751	1.123677674			
2236		-6.0	-43.6	9.8		18.2	9.9		X	
			316.4			17.8	7.9			
						17.6	7.8			
						18.1	9.4			
						18.4	10			
						18.2	9.3			
						18.1	10.4			
						17.6	7.3			
						18.1	9.7			
						18.5	9.1			
						18.5	9			
						18.3	9.6			

				Average	18.11666667	9.116666667			
				Standard Deviation	0.309936455	0.965621169			
2237	Wichmann	-7.6	-38.0	9	15.1	4.7	X		
			322.0		14.5	4			
					14.3	3.9			
					15.3	3.9			
					14.3	4.1			
					15.1	4			
					14.5	4.3			
					13.5	3.5			
					13.1	3.6			
					14.5	3.8			
					14.9	4			
					15.7	4.4			
				Average	14.56666667	4.016666667			
				Standard Deviation	0.735259179	0.332574895			
2238		-3.1	-30.5	10.5	13.6	3	X		
			329.5		13.8	3.4			
					13.5	3.3			
					14.7	4.1			
					13.8	3.5			
					12.9	3			
					13.2	3.1			
					12.6	2.8			
					11.5	2.6			
					12.4	2.8			
					12.7	3.3			
					13.6	3			
				Average	13.19166667	3.158333333			
				Standard Deviation	0.831710541	0.398767039			
2239	Herigonius	-13.4	-33.8	14.9	17.7	7.2	X		
			326.2		17.4	7.4			
					17.5	7.9			

						17.7	8.4			
						17.6	7.4			
						17.2	6.5			
						17	7.5			
						17	8.8			
						14.7	6			
						17.1	6.4			
						17.8	6.7			
						17.6	6.2			
					Average	17.19166667	7.2			
					Standard Deviation	0.833893751	0.878014289			
2240		-12.2	-38.9	6.6		10.8	1.5		X	
			321.1			13.1	2.1			
						12.2	2.8			
						13.2	2.3			
						12.8	2.8			
						11.8	3.5			
						12.1	2.8			
						1.1	2.1			
						11.9	2.3			
						11	2.5			
						10.6	1.8			
						12.6	2.3			
					Average	11.1	2.4			
					Standard Deviation	3.264687093	0.529150262			
2241	Norman	-11.8	-30.1	14.2		15.2	4.7		X	
			329.9			16.7	4.8			
						16.8	5.4			
						17	5.5			
						5.7	5			
						14.9	4.2			
						14.8	4.3			
						16.3	5.3			
						16.3	4.6			

2244		-23.8	-32.7	7.8		14.9	5.1		X	
			327.3			15	5.6			
						13.8	3.8			
						14.6	4			
						13.9	3.8			
						13.3	3.8			
						11.9	3.6			
						12.5	3.4			
						11.5	3.2			
						13.2	3.2			
						14.2	4.6			
						14.7	4.9			
				Average		13.625	4.083333333			
				Standard Deviation		1.171731431	0.784895284			
2245		-22.0	-34.9	10.9		15.8	5.2		X	
			325.1			13.7	4.6			
						14.7	4.3			
						15	5.1			
						17.2	6.9			
						17	0.2			
						17.2	6.8			
						17.6	7.4			
						17.8	7.7			
						17.3	6.5			
						17.3	6.4			
						17.5	8.7			
				Average		16.50833333	5.816666667			
				Standard Deviation		1.356102928	2.206120962			
2246		-29.2	-35.6	7.4		13.1	1.4		X	
			324.4			11.9	2.2			
						12.6	2.4			
						12.7	2.3			
						12.9	2.3			
						12.7	2.8			

						10.7	2			
						11.8	2.3			
						11.5	1.6			
						11.9	1.9			
						12.6	2.6			
						12.6	2.2			
					Average	12.25	2.166666667			
					Standard Deviation	0.696092993	0.393892771			
2247		-31.2	-35.3	11.1		6.7	1.1	X		
			324.7			7.4	1.2			
						9.4	1.3			
						10.1	1.9			
						8.6	1.3			
						9.1	1.2			
						8.5	1.4			
						8.9	1.8			
						9.6	1.6			
						7.4	1.3			
						5.9	1.2			
						9.1	1.4			
					Average	8.391666667	1.391666667			
					Standard Deviation	1.270260055	0.250302847			
2248	Remsdent	-32.9	-31.7	25.6		11.6	3.4	X		
			328.3			11.7	3			
						9.6	3.2			
						10.5	3.7			
						8.4	3.4			
						8	2.6			
						4.9	1.5			
						6.9	1.8			
						5.7	1.9			
						6.5	1.7			
						8.5	1.6			
						8.7	2.7			

				Average	8.416666667	2.541666667			
				Standard Deviation	2.187498918	0.805050347			
2249	-37.8	-37.6	12.1		6.3	0.7	X		
		322.4			3.7	0.3			
					9.4	1.3			
					6.2	0.8			
					4.7	0.6			
					4.2	0.8			
					3.7	0.4			
					5.7	0.5			
					8.8	1.2			
					8.3	1.1			
					7.5	0.6			
					8.7	1.4			
				Average	6.433333333	0.808333333			
				Standard Deviation	2.082539243	0.362963392			
2250	-35.3	-31.5	11.7		7.5	1.2	X		
		328.5			9	2.1			
					7.2	2.1			
					9.7	2			
					7.2	2.6			
					4.7	1.1			
					7.8	1.7			
					5.8	1.1			
					8.7	1.9			
					8.3	1.7			
					5.9	1.6			
					7.3	1.6			
				Average	7.425	1.725			
				Standard Deviation	1.43661534	0.451512609			
2251	-38.2	-34.8	16.9		5	0.6	X		
		325.2			5.2	0.7			
					6.7	1.1			

						5.9	0.9			
						6	0.7			
						6.8	0.8			
						7.7	1.2			
						6.2	0.6			
						7.4	1			
						6.4	0.7			
						6.2	0.6			
						5	0.5			
					Average	6.208333333	0.783333333			
					Standard Deviation	0.871214756	0.220879784			
2252		-41.6	-35.8	8.3		7	1.1	X		
			324.2			7.6	0.9			
						5.1	0.7			
						5.8	0.7			
						6.2	0.6			
						4.6	0.5			
						4.7	0.5			
						4.1	0.4			
						5.2	0.7			
						4.6	0.5			
						4.3	0.4			
						6.6	0.7			
					Average	5.483333333	0.641666667			
					Standard Deviation	1.14243228	0.206522433			
2253		-43.6	-35.5	5.5		7.9	1	X		
			324.5			7.7	1.2			
						7.3	1.2			
						7.5	1.7			
						6.7	1.6			
						6.3	1.5			
						5.3	0.7			
						5.2	0.9			
						5	0.7			

2256		-47.2	-37.4	11		10.7	1.4	X		
			322.6			8.6	1			
						10.1	1.4			
						10.1	1.5			
						7.6	1.1			
						7.3	1.4			
						6	0.8			
						5.7	0.7			
						8.1	1.1			
						9	1.3			
						9.6	1.4			
						9.1	1.6			
					Average	8.491666667	1.225			
					Standard Deviation	1.603665309	0.283244193			
2257		-50.3	-33.8	15.1		8	0.8	X		
			326.2			10.1	1.3			
						10.4	1.1			
						8.2	0.8			
						6.4	0.3			
						5.3	0.6			
						6.1	0.4			
						6	0.6			
						9	0.8			
						7	0.6			
						8.2	1.1			
						6.7	0.3			
					Average	7.616666667	0.725			
					Standard Deviation	1.641414763	0.322278818			
2257		-51.4	-30.2	17.8		8	0.7	X		
			329.8			7.4	1			
						9.3	1			
						6.3	0.9			
						4.2	1.3			
						6.5	1.4			

						5	0.7			
						4.6	0.6			
						4.8	0.5			
						8.6	1.1			
						7.2	0.6			
						6.3	0.4			
					Average	6.51666667	0.85			
					Standard Deviation	1.649150378	0.317661913			
2259		-54.7	-36.0	21		7.2	0.6	X		
			324.0			9	0.8			
						8.4	0.9			
						13	1.21			
						12.1	1.4			
						7.5	0.3			
						6.6	0.5			
						4.2	0.2			
						6	0.5			
						4.7	0.6			
						8.1	0.6			
						7.3	0.9			
					Average	7.84166667	0.70916667			
					Standard Deviation	2.617235993	0.351502188			
2260		-59.7	-33.3	29		12.3	3.8	X		
			326.7			11.9	2.7			
						10.5	1.2			
						4.9	0.4			
						3.3	0.3			
						4.3	0.5			
						5.6	0.5			
						5.6	0.6			
						4.8	0.3			
						5.8	0.6			
						4.9	0.5			
						5.7	0.3			

				Average	6.63333333	0.975			
				Standard Deviation	3.081125336	1.11447093			
2261	-58.7	-37.6	16.5		9.7	1.1	X		
					6.8	0.7			
					6.9	0.4			
					5.5	0.7			
					6.9	0.9			
					2.2	0.3			
					7.3	0.8			
					8.7	0.8			
					8.1	0.7			
					10.1	1			
					10.1	0.9			
					5.1	0.6			
				Average	7.283333333	0.741666667			
				Standard Deviation	2.309991473	0.231431644			
2262	-60.9	-36.0	7.3		4	0.4	X		
		324.0			3.4	0.2			
					3	0.2			
					3.1	0.3			
					3.7	0.2			
					2.1	0.2			
					3.2	0.3			
					3.4	0.3			
					4.5	0.4			
					6.7	0.3			
					6.9	0.3			
					4.8	0.4			
				Average	4.066666667	0.291666667			
				Standard Deviation	1.458725056	0.079296146			
2263	-63.5	-38.1	7.6		13.9	3.2	X		
		321.9			9.8	1.2			
					7.7	0.6			

						5.4	0.4			
						4	0.1			
						2.5	0.2			
						2.6	0.2			
						4	0.4			
						1.1	0.1			
						3.7	0.4			
						5.5	0.4			
						9.3	1			
					Average	5.79166667	0.68333333			
					Standard Deviation	3.715191989	0.86216781			
2264		-65.9	-34.9	8		4.8	0.3	X		
			325.1			7.8	1			
						6.8	0.4			
						3.2	0.2			
						3.5	0.3			
						4.5	0.3			
						6.2	0.4			
						4.5	0.2			
						8.4	0.7			
						6.2	0.6			
						8.8	0.7			
						9.1	0.9			
					Average	6.15	0.5			
					Standard Deviation	2.065517765	0.273030135			
2265		-68.8	-37.9	5		8.5	0.9	X		
			322.1			9.2	0.7			
						8.6	0.6			
						7.5	0.7			
						3.6	0.2			
						4.1	0.4			
						3.9	0.2			
						6.7	0.6			
						7	0.5			

2268		-62.6	-28.1	14.5		4.2	0.8	X		
			331.9			7.3	0.4			
						9.2	0.9			
						10.2	1.4			
						6.9	0.8			
						2.5	0.2			
						2.6	0.2			
						5.8	0.4			
						3.6	0.4			
						7.3	0.7			
						9.6	2			
						7.3	1.5			
				Average		6.375	0.808333333			
				Standard Deviation		2.660869646	0.564814263			
2269	Schiener A ?	-60.5	-28.0	12.8		7.1	0.5	X		
			332.0			9.2	0.6			
						8.2	0.7			
						4.4	0.4			
						2.6	0.2			
						0.5	0.3			
						1.6	0.2			
						1.6	0.2			
						0.7	0.2			
						2.3	0.3			
						3.5	0.3			
						7.4	0.4			
				Average		4.091666667	0.358333333			
				Standard Deviation		3.099401213	0.167648622			
2270		-63.2	-25.6	10		6.7	0.5	X		
			334.4			5.9	0.5			
						7	0.6			
						4.2	0.4			
						3.7	0.4			
						6.3	0.7			

						3.6	0.2			
						4	0.4			
						2.8	0.3			
						7.2	1.4			
						3.8	0.4			
						4.2	0.4			
					Average	4.95	0.51666667			
					Standard Deviation	1.549486719	0.30698929			
2271		-53.0	-24.0	28.8		7.2	0.7	X		
			336.0			7.6	0.7			
						7.2	0.9			
						4.9	0.3			
						2.7	0.2			
						3	0.3			
						4.5	0.4			
						2.8	0.3			
						2	0.2			
						3.1	0.3			
						5.6	0.4			
						5.9	1.2			
					Average	4.708333333	0.49166667			
					Standard Deviation	1.990640981	0.314666731			
2272		-50.9	-25.7	11.5		12.4	1.6	X		
			334.3			3.8	0.4			
						5	0.4			
						3.4	0.3			
						4.5	0.1			
						3.7	0.3			
						6.7	0.7			
						12	1			
						14.8	2.2			
						12.3	1.6			
						6.1	0.7			
						6.6	0.7			

				Average	7.608333333	0.833333333			
				Standard Deviation	4.09044526	0.647138222			
2273	-59.1	-25.1	9		4.5	0.3	X		
		334.9			5.3	0.4			
					3.3	0.3			
					4.8	0.5			
					3.7	0.6			
					0.7	0.1			
					3.7	0.2			
					2	0.2			
					4.2	0.3			
					6.5	0.6			
					6.4	0.6			
					3.3	0.4			
				Average	4.033333333	0.375			
				Standard Deviation	1.66969422	0.171225529			
2274	-55.4	-21.9	7		3.7	0.3	X		
		338.1			3.8	0.4			
					9.1	1.1			
					6.1	0.5			
					5.6	0.6			
					5.3	0.3			
					4.3	0.4			
					2.6	0.3			
					2.7	0.3			
					5.6	0.6			
					2.6	0.2			
					4.2	0.3			
				Average	4.633333333	0.441666667			
				Standard Deviation	1.865638245	0.242930343			
2275	-45.2	-28.5	12		8	1	X		
		331.5			7.7	0.7			
					11.5	1.6			

						7.1	0.6			
						5.1	0.5			
						5.9	0.7			
						5.6	0.5			
						4.4	0.6			
						6.4	0.4			
						4.9	0.7			
						4	0.9			
						8.1	1			
					Average	6.558333333	0.766666667			
					Standard Deviation	2.08738999	0.325669474			
2276		-45.2	-24.3	10.1		7.3	0.6	X		
			335.7			5.2	0.8			
						6.6	0.7			
						4.9	0.7			
						5.4	0.7			
						4.6	0.6			
						4.3	0.6			
						5.7	0.8			
						6.9	0.8			
						6.8	0.8			
						6.4	0.5			
						7.2	0.7			
					Average	5.941666667	0.691666667			
					Standard Deviation	1.053529422	0.099620492			
2277		-49.1	-23.5	13.2		8.9	1.1	X		
			336.5			5.1	0.4			
						4.4	0.8			
						3	0.4			
						6.1	1.1			
						6.9	1.3			
						7.7	0.7			
						6.6	0.5			
						9.4	1.5			

2280		-38.0	-24.3	13.5		7.3	0.9	X		
			335.7			8.3	1.1			
						9.5	1			
						8.7	0.8			
						6.7	0.7			
						6.4	0.6			
						5.5	0.5			
						4.5	0.5			
						4.3	0.5			
						6.4	0.6			
						8.5	0.8			
						8	1.1			
					Average	7.008333333	0.758333333			
					Standard Deviation	1.672482278	0.227469612			
2281		-34.8	-21.4	20.7		8.9	0.8	X		
			339.6			7.9	0.8			
						9	1.6			
						6.5	0.9			
						6.3	0.8			
						7.8	0.8			
						5.1	0.6			
						4.6	0.6			
						5.2	0.5			
						4.9	0.7			
						8.2	1.3			
						8.6	1.4			
					Average	6.916666667	0.9			
					Standard Deviation	1.671598763	0.346410162			
2282		-38.3	-26.3	11.5		7.9	1.1	X		
			333.7			6.8	0.8			
						7.1	1.1			
						5.3	0.8			
						5.5	0.7			
						4.5	0.3			

						4.9	0.7			
						3.7	0.5			
						5.6	0.6			
						6.6	0.6			
						7.9	1.4			
						8.2	1.2			
					Average	6.16666667	0.81666667			
					Standard Deviation	1.464323197	0.321455025			
2283		-34.7	-25.6	13		8.8	1.6	X		
			334.4			6.6	0.8			
						6.9	1			
						6.9	1.5			
						6.8	1.2			
						6.3	1.2			
						5.9	0.9			
						8	1.2			
						8.1	1.5			
						8.1	1.4			
						7.9	1.1			
						6	0.5			
					Average	7.19166667	1.158333333			
					Standard Deviation	0.951036118	0.323217724			
2284		-30.6	-27.7	8		8.4	1.8	X		
			332.3			9	1.9			
						8.1	1.6			
						5.9	1.1			
						5.8	1.9			
						10.1	2.5			
						10.5	3.4			
						8.2	1.7			
						5.6	1.4			
						4.8	1.1			
						5.7	1.1			
						8.3	1.7			

				Average	7.533333333	1.766666667			
				Standard Deviation	1.904221785	0.656898129			
2285		-23.3	-28.3	15.5	12.5	2.8		X	
					11.3	2.9			
					12.9	3.3			
		(Mare Nubium - West)			12.1	3.5			
					10.8	2.5			
					11	2.5			
					9.2	1.9			
					13.1	4			
					13.4	2.6			
					12.6	3.2			
					12.2	2.8			
					10.8	1.5			
				Average	11.825	2.791666667			
				Standard Deviation	1.224095213	0.678847062			
2286		-28.3	-22.6	17	7.9	1.5		X	
			337.4		10.5	1.8			
					9.4	2.1			
					8.7	1.9			
					8.8	1.9			
					8.8	1.4			
					7.4	1.5			
					10.9	2			
					14	3			
					12.1	2.1			
					8.6	1.1			
					7.9	1			
				Average	9.583333333	1.775			
				Standard Deviation	1.950679757	0.534492112			
2287		-23.5	-21.8	19.9	15.3	4.6		X	
			338.2		16.5	5.8			
					16.1	4.7			

						16.3	4.6			
						11.3	3			
						11.1	2.3			
						12.8	3.5			
						13.2	4.1			
						13.6	3.7			
						14.1	4.3			
						14.1	3.7			
						15.3	5.1			
					Average	14.14166667	4.116666667			
					Standard Deviation	1.835240055	0.949481517			
2288		-26.0	-28.5	10.5		10.1	1.8		X	
			331.5			9.8	1.4			
						2.2	2.3			
						11.3	2.3			
						10.2	1.9			
						7.5	1.5			
						7	1			
						8.9	0.7			
						9	2			
						8.4	1.3			
						10	1.6			
						10.8	1.9			
					Average	8.766666667	1.641666667			
					Standard Deviation	2.431360761	0.490747729			
2289		-21.1	-26.6	8.5		12	3		X	
			333.3			11.6	2.7			
						10.9	3.3			
						9.7	1.9			
						10	2.4			
						9.6	1.3			
						10.7	2.5			
						10.1	1.6			
						8.8	0.2			

2292		-18.3	-21.7	6.9		15.6	4.8		X	
			338.3			15.8	4.9			
						15.6	6			
						16	3.6			
						15.5	4.9			
						15.5	4.8			
						15.1	4.3			
						14.9	3.9			
						14.5	4			
						14.5	3.9			
						15.3	4			
						15.3	4.8			
				Average		15.3	4.491666667			
				Standard Deviation		0.47482054	0.668047812			
2293		-5.5	-20.8	10.7		13.7	2.8		X	
			33.9.2			13.2	2.5			
						12.3	2.6			
						11.8	2.5			
						11.1	3.1			
						8.5	1.9			
						11.3	2.8			
						13.4	3.4			
						12.2	3.4			
						14.2	4.2			
						15	3.4			
						14.2	3			
				Average		12.575	2.966666667			
				Standard Deviation		1.776679743	0.592887132			
2294	Euclides	-7.4	-29.4	10.7		10.2	1.6		X	
			330.6			10	0.6			
						11.3	1.3			
						10.9	1.6			
						10.9	1.8			
						11	1.7			

						11.4	1.5			
						11.6	1.6			
						11.8	1.8			
						11.5	1.7			
						11.7	1.9			
						11.1	0.5			
					Average	11.11666667	1.466666667			
					Standard Deviation	0.563807403	0.455937263			
2295		-1.5	-29.1	18.7		14.4	3.9		X	
			330.9			14.6	4.2			
						14.8	4			
						13.5	3.6			
						14.1	3.4			
						14.7	4.3			
						15.1	4.8			
						15.1	4.3			
						15.3	4.1			
						15	3.4			
						14.8	3.9			
						14.4	3.9			
					Average	14.65	3.983333333			
					Standard Deviation	0.5	0.401889477			
2296		-9.8	-22.5	5		17.2	6.2		X	
			337.5			16.7	5.7			
						16.9	3.1			
						17.2	6			
						17.1	6.1			
						17.1	5.9			
						17.3	7.4			
						17.6	6.6			
						17	5.2			
						17.6	7.4			
						17.3	7			
						17.5	7.1			

				Average	17.20833333	6.141666667			
				Standard Deviation	0.274551977	1.185103243			
2297		-8.7	-11.4	12	17.2	7.2	X		
			348.6		16.7	7.1			
		(Mare Nubium)			16	6.4			
					16.7	7.9			
					16.6	6.6			
		Only data from Westreb half of crater available			16.7	6.8			
					16.9	7			
					16.9	7.4			
					16.9	6.8			
					17	7.3			
					16.9	7.3			
					16	5.7			
				Average	16.70833333	6.958333333			
				Standard Deviation	0.367938565	0.561585958			
2298	Turner	-1.4	-13.1	10.5	14.1	3.6	X		
			346.9		14.3	3			
					14.3	3.2			
					13.2	3.9			
					15.1	4.1			
					15.5	4.5			
					14.7	3.7			
					14.5	3.6			
					13.2	3.2			
					14.3	3.3			
					15	3.7			
					15.9	4.8			
				Average	14.50833333	3.716666667			
				Standard Deviation	0.81291656	0.540762649			
2299	Tolansky	-9.5	-15.9	13.3	13.8	2.6	X		
			344.1		13.2	2.2			
					13.1	1.6			

						12.1	1.9			
						12.4	2			
						13.8	2.9			
						13.7	3.1			
						10.6	1.5			
						11.3	2.3			
						13.6	3.1			
						13.6	3.2			
						13.7	2.9			
					Average	12.90833333	2.441666667			
					Standard Deviation	1.07657566	0.606717447			
2300	Kund	-11.6	-11.6	10.7		14.9	1.8		X	
			348.6			15.2	4.1			
						15	4			
						14.5	2.8			
						14	3.3			
						13.9	3.6			
						12.8	2.8			
						14.5	3.8			
						15	3.6			
						14.6	3.2			
						15.2	4.1			
						15.3	3.1			
					Average	14.575	3.35			
					Standard Deviation	0.721267823	0.67217422			
2301		-14.6	-15.2	13.5		12.6	2.8		X	
			344.8			12.5	2.8			
						11.4	3.1			
						13.3	3			
						13.3	2.7			
						13	3.6			
						12.1	3.4			
						10.3	3			
						11.1	2.6			

2304		-27.1	-17.5	10.5		16.9	8.1		X	
			342.5			16.9	8.2			
						16.4	7.6			
						16.2	7.1			
						16.3	6.9			
						16.5	7.7			
						16.3	5.6			
						17	8.2			
						17	9.2			
						17	8.6			
						16.9	7.9			
						17	8			
				Average		16.7	7.758333333			
				Standard Deviation		0.327525155	0.915977703			
2305		-24.9	-18.5	5.5		17.2	7.4		X	
			341.5			17.1	6.3			
						17.4	6.8			
						17	6.8			
						17	6.6			
						17.1	7.4			
						16.9	17.5			
						17	6			
						16.6	4			
						17.3	7.4			
						17.3	7.6			
						17.4	9.8			
				Average		17.10833333	7.8			
				Standard Deviation		0.231431644	3.330028665			
2306		-33.2	-19.3	16.2		5.3	0.6		X	
			340.7			7.3	0.7			
						6.5	0.9			
						7.5	0.9			
						4.9	0.5			
						4.8	0.4			

						5.5	0.8			
						4.4	0.4			
						4.1	0.4			
						5.1	0.5			
						5.4	0.5			
						6.2	0.6			
					Average	5.583333333	0.6			
					Standard Deviation	1.081945498	0.185864075			
2307		-35.7	-15.3	16.5		6.7	0.7	X		
			344.7			4.9	0.3			
						4.5	0.7			
						4.8	0.4			
						3.4	0.4			
						3.3	0.2			
						2.5	0.3			
						4.6	0.5			
						4.9	0.4			
						6.8	0.9			
						6.2	0.6			
						7	0.7			
					Average	4.966666667	0.508333333			
					Standard Deviation	1.468662554	0.210878394			
2308		-35.1	-11.4	13.3		6.4	0.5	X		
			348.6			5.8	0.5			
						6.4	0.6			
						5.9	0.5			
						4	0.3			
						4.1	0.3			
						4.2	0.2			
						3.3	0.2			
						5.2	0.4			
						3.9	0.3			
						6.6	0.5			
						5.4	0.4			

				Average	5.1	0.391666667			
				Standard Deviation	1.150493965	0.131137217			
2309	-38.1	-14.5	9.6		8.6	0.6	X		
		345.5			7.2	0.6			
					5.2	0.4			
					5.8	0.5			
					4.7	0.4			
					4.7	0.4			
					4.8	0.3			
					3.9	0.3			
					7.2	0.5			
					8.1	0.6			
					8.3	0.7			
					9.1	0.5			
				Average	6.466666667	0.483333333			
				Standard Deviation	1.81525522	0.126730446			
2310	-39.7	-17.5	20.2		6.5	0.5	X		
		342.5			6.4	1			
					6.4	0.4			
					4.9	0.4			
					4.4	0.4			
					3.8	0.3			
					3.8	0.3			
					4.4	0.4			
					3.7	0.3			
					5.2	0.6			
					7.5	0.6			
					6.7	0.5			
				Average	5.308333333	0.475			
				Standard Deviation	1.331750955	0.195982374			
2311	-43.1	-17.2	17		4.6	0.4	X		
		342.8			5.4	0.5			
					3.4	0.3			

						3.9	0.3			
						3.6	0.3			
						4.5	0.4			
						3.6	0.7			
						4.2	0.5			
						5	0.6			
						6.2	0.5			
						5.2	0.4			
						6.5	0.5			
					Average	4.675	0.45			
					Standard Deviation	1.016343714	0.124316312			
2312		-45.3	-15.8	7.7		5	0.4	X		
			344.2			5.9	0.5			
						7.6	0.8			
						5.1	0.3			
						4.2	0.5			
						5.1	0.7			
						5.8	0.4			
						3.6	0.3			
						3.7	0.2			
						4.1	0.3			
						6.3	0.5			
						6.6	0.5			
					Average	5.25	0.45			
					Standard Deviation	1.236931688	0.173205081			
2313		-48.1	-17.5	17.5		10.6	2.1	X		
			342.5			5.7	0.5			
						6.7	0.6			
						5.9	0.5			
						3.9	0.3			
						3.2	0.3			
						3.2	0.3			
						4	0.6			
						5.4	0.5			

2316		-52.0	-13.9	16.8		6.2	0.5	X		
			346.1			4.2	0.3			
						5.7	0.5			
						5.6	0.6			
						2.8	0.2			
						2.7	0.2			
						4.6	0.3			
						1.9	0.2			
						1.7	0.1			
						3.9	0.3			
						5.5	0.4			
						6.3	0.4			
					Average	4.258333333	0.333333333			
					Standard Deviation	1.658837673	0.149747262			
2317		-54.8	-10.4	13.5		4	0.3	X		
			349.6			6.2	0.5			
						7.5	0.8			
						4.9	0.4			
						4.3	0.4			
						2.9	0.4			
						3.7	0.5			
						3.5	0.4			
						3.8	0.3			
						4.5	0.7			
						2.8	0.4			
						2.2	0.4			
					Average	4.191666667	0.458333333			
					Standard Deviation	1.479224817	0.150504203			
2318		-58.7	-12.3	28.1		10.6	1.7	X		
			347.7			6.5	0.8			
						7.3	0.4			
						3	0.2			
						0.7	0.2			
						0.8	0.2			

						0.7	0.1			
						0.3	0.1			
						2.3	0.2			
						4.3	0.4			
						4.8	0.5			
						4.2	0.3			
					Average	3.791666667	0.425			
					Standard Deviation	3.170161548	0.447467622			
2319		-58.1	-18.0	13.1		6.5	0.5	X		
			342.0			4.3	0.3			
						6.8	1			
						1.1	0.4			
						3.6	0.4			
						1.9	0.2			
						2.1	0.3			
						0.1	0.2			
						4.2	0.4			
						4	0.3			
						5.9	0.5			
						2.2	0.4			
					Average	3.558333333	0.408333333			
					Standard Deviation	2.143259342	0.210878394			
2320		-53.2	-15.3	7.6		3.7	0.4	X		
			344.7			4.7	0.5			
						4.9	0.8			
						4.1	0.4			
						3.8	0.5			
						2.3	0.2			
						2	0.3			
						2.5	0.3			
						3.3	0.4			
						4.5	0.4			
						7.4	1			
						2.2	0.3			

				Average	3.783333333	0.458333333			
				Standard Deviation	1.524248449	0.227469612			
2321	-62.3	-11.9	15.1		4.9	0.3	X		
		348.1			2.4	0.2			
					3.5	0.2			
					3.5	0.2			
					2.3	0.1			
					0.6	0.1			
					1.6	0.1			
					3.6	0.2			
					2.7	0.2			
					0.4	0.1			
					5.9	0.3			
					6.8	0.5			
				Average	3.183333333	0.208333333			
				Standard Deviation	1.961832786	0.116450015			
2322	-66.2	-18.3	5		5.6	0.5	X		
		341.7			7.2	1			
					5.9	0.8			
					4	0.5			
					3.1	0.4			
					3.8	0.2			
					4	0.4			
					2.4	0.2			
					5.5	0.5			
					5.5	0.6			
					4.5	0.2			
					5.2	0.5			
				Average	4.725	0.483333333			
				Standard Deviation	1.338333428	0.240580107			
2323	-69.1	-16.7	5.8		6.3	0.2	X		
		343.3			9.9	0.8			
					3.2	0.9			

						3.1	0.2			
						3.5	0.2			
						0.1	0.1			
						0.2	0			
						1	0.1			
						2.4	0.1			
						7	0.7			
						13.5	3.4			
						7.1	0.4			
					Average	4.775	0.591666667			
					Standard Deviation	4.097255179	0.934644642			
2324		-60.4	-19.7	20		9.4	0.9	X		
			340.3			7.2	0.5			
						8.3	0.7			
						1	0.1			
						1	0.1			
						1	0.1			
						2.4	0.3			
						3.6	0.3			
						8.1	1			
						5	0.4			
						4.5	0.3			
						6.4	0.8			
					Average	4.825	0.458333333			
					Standard Deviation	3.06390274	0.320392751			
2325		-67.5	-12.0	20		6.5	0.6	X		
			348.0			7.1	0.4			
						8.6	0.8			
						5.5	0.3			
						2.5	0.3			
						2.7	0.3			
						1.7	0.1			
						3	0.2			
						1.6	0.2			

2328		-60.4	-4.3	12.1		5.3	0.7	X		
			355.7			6.8	0.9			
						4.5	0.4			
						7.8	0.8			
						4	0.4			
						1.1	0.4			
						3.7	0.5			
						1.5	0.3			
						4.2	0.5			
						7.6	0.9			
						6.4	0.7			
						2.2	0.2			
				Average		4.591666667	0.558333333			
				Standard Deviation		2.271746758	0.235326981			
2329		-62.9	-4.4	6.8		6.5	0.9	X		
			355.6			7.9	1.4			
						7.8	0.7			
						6.8	1			
						4.7	0.4			
						2.6	0.2			
						1.7	0.2			
						3.4	0.2			
						1.6	0.3			
						2.1	0.2			
						3.7	0.4			
						6.9	0.7			
				Average		4.641666667	0.55			
				Standard Deviation		2.426541996	0.391964748			
2330		-56.4	-2.4	27		8.1	0.9	X		
			357.6			5.3	0.5			
						5	0.1			
						6.1	0.5			
						6.8	1.2			
						2.1	0.4			

						5	0.5			
						3.6	0.8			
						2.5	0.4			
						4.5	0.4			
						5.6	0.7			
						6.3	0.6			
					Average	5.075	0.583333333			
					Standard Deviation	1.732116414	0.285508584			
2331		-54.4	-8.5	12		7.1	0.7	X		
			351.5			5.9	0.7			
						7.8	0.6			
						4	0.3			
						3.7	0.5			
						2.8	0.3			
						3.5	0.4			
						2.7	0.4			
						2.7	0.3			
						4.6	0.3			
						5	0.3			
						4.7	0.3			
					Average	4.541666667	0.425			
					Standard Deviation	1.682778186	0.160255478			
2332		-52.5	-9.9	15.2		9.3	1.1	X		
			250.1			7	0.5			
						7.2	0.5			
						6	0.4			
						5.1	0.3			
						3.7	0.3			
						4.3	0.5			
						3	0.2			
						3.8	0.2			
						6.2	0.4			
						7.9	0.6			
						10.9	1.2			

				Average	6.2	0.516666667			
				Standard Deviation	2.399621182	0.321455025			
2333	-50.4	-9.3	9.7		3.1	0.2	X		
		350.7			6.2	0.6			
					5.1	0.6			
					4.5	0.3			
					3.9	0.4			
					2.7	0.2			
					5.2	0.2			
					4.5	0.4			
					3.9	0.3			
					4.3	0.4			
					3.5	0.2			
					3	0.2			
				Average	4.158333333	0.333333333			
				Standard Deviation	1.02465811	0.149747262			
2334	-48.8	-4.4	11.5		7.7	0.5	X		
		355.6			8	0.5			
					7	0.4			
					5.5	0.3			
					5.2	0.3			
					3.3	0.2			
					4.7	0.3			
					5.1	0.4			
					4.4	0.2			
					4.7	0.5			
					7.1	0.6			
					6.1	0.5			
				Average	5.733333333	0.391666667			
				Standard Deviation	1.45185357	0.131137217			
2335	-43.8	-0.5	17		5.7	0.5	X		
		359.5			6	0.5			
					6.1	0.4			

						3.7	0.3			
						2.7	0.3			
						2.1	0.2			
						1.6	0.3			
						3.4	0.4			
						1.9	0.2			
						4.5	0.5			
						5.5	0.6			
						5.9	0.5			
					Average	4.091666667	0.391666667			
					Standard Deviation	1.738054468	0.131137217			
2336		-49.3	-8.9	11.7		7.7	0.8	X		
			351.1			10	1.4			
						4.3	0.8			
						8.2	1			
						7	0.7			
						3.9	0.3			
						4.1	0.2			
						5	0.3			
						8.2	0.7			
						9.5	0.8			
						8.2	1			
						5.6	0.6			
					Average	6.808333333	0.716666667			
					Standard Deviation	2.150880722	0.340676688			
2337		-49.5	-0.9	6.8		5.6	0.5	X		
			359.1			6.6	0.8			
						5.6	0.8			
						4.6	0.3			
						3.2	0.2			
						2.9	0.2			
						3.7	0.4			
						4.8	0.4			
						4	0.4			

2340		-34.6	-6.2	10		6.1	0.5	X		
			353.8			5.3	0.5			
						6.4	0.5			
						5	0.4			
						5	0.2			
						4.1	0.3			
						5.3	0.5			
						6.1	0.3			
						5.6	0.5			
						6.3	0.7			
						5.4	0.6			
						6.2	0.6			
					Average	5.566666667	0.466666667			
					Standard Deviation	0.685344417	0.143548113			
2341	Hell	-32.4	-7.8	32.3		5.7	0.4	X		
			252.2			6.3	0.5			
						3.1	0.2			
						2.7	0.3			
						4.3	0.4			
						5	0.4			
						3.4	0.3			
						2.8	0.3			
						5	0.5			
						4.3	0.3			
						3.8	0.3			
						4.2	0.3			
					Average	4.216666667	0.35			
					Standard Deviation	1.135247937	0.090453403			
2342		-37.9	-7.1	10		7.3	0.8	X		
			352.9			4.4	0.3			
						4.4	0.5			
						5	0.4			
						6.5	0.6			
						5.3	0.4			

						5.6	0.4			
						8.9	0.8			
						7	0.7			
						6.9	0.8			
						2.9	0.2			
						4.7	0.6			
					Average	5.741666667	0.541666667			
					Standard Deviation	1.635658518	0.206522433			
2343		-27.9	-3.5	10.1		5.9	0.6	X		
			356.5			6.1	0.5			
						5.9	0.4			
						5.4	0.5			
						6.8	0.6			
						5.9	0.6			
						7.1	0.8			
						5.8	0.5			
						7.1	0.7			
						6.1	0.6			
						6.2	0.4			
						6.9	0.7			
					Average	6.266666667	0.575			
					Standard Deviation	0.564613035	0.121543109			
2344	Birt	-22.4	-8.6	15.3		13.5	2.7	X		
			351.4			13.1	2.8			
						13.3	3.1			
		Mare Nubium				13.2	2.2			
						11.3	2.1			
						12.5	2.7			
						12.5	2.5			
						14.5	3.4			
						12.7	2.4			
						13.4	2.6			
						13.5	3			
						13.7	2.8			

				Average	13.1	2.691666667			
				Standard Deviation	0.79200551	0.370401093			
2345		-21.5	-4.9	20	12.5	1.2	X		
			355.1		13.2	1.9			
					8.4	1			
					7.3	0.8			
					6.9	0.8			
					7.4	0.7			
					6.8	0.8			
					7.8	0.9			
					7.1	0.7			
					6.6	0.7			
					9.8	0.8			
					10.5	1.2			
				Average	8.691666667	0.958333333			
				Standard Deviation	2.286505207	0.344985727			
2346	Lippershey	-25.9	-10.5	6.3	16.8	7.2	X		
			349.7		16.2	6.4			
					16.3	6.4			
		(Mare Nubium)			15.3	6.1			
					14.7	5.9			
					16.1	5.8			
					16.3	7.9			
					16.3	7.4			
					16.9	7.5			
					16.4	7.8			
					16.7	7.7			
					16.5	7.2			
				Average	16.20833333	6.941666667			
				Standard Deviation	0.627344089	0.772785203			
2347		-18.1	-1.5	8.5	9.3	1	X		
			358.5		8.7	0.6			
					9.5	0.7			

						5.5	0.5			
						5.3	0.3			
						6.1	0.4			
						8.9	0.3			
						8.9	0.7			
						7.6	0.7			
						7.9	0.5			
						8.4	0.5			
						7.9	0.6			
					Average	7.833333333	0.566666667			
					Standard Deviation	1.452479594	0.196946386			
2348		-15.2	-6.8	9		12	1.8		X	
			353.2			11.3	1.6			
		(Mare Nubium)				1.1	2			
						10.6	1.2			
						11.6	1.6			
						12	2			
						13.2	2			
						14.5	2.4			
						12.8	2.2			
						12.6	1.7			
						12.3	1.5			
						11.5	1.7			
					Average	11.29166667	1.808333333			
					Standard Deviation	3.36329339	0.328794861			
2349		-15.6	-0.5	6.6		8.3	1		X	
			395.5			9.9	1.2			
						8.1	1			
						7.4	0.8			
						6.9	0.9			
						7.1	0.8			
						7.9	0.7			
						7	0.6			
						4.2	0.6			

2352		-3.2	-5.2	12		10.3	0.7	X		
			354.8			9.9	0.9			
						10	1			
						10.1	1.1			
						10.5	0.8			
						9.9	0.8			
						9	0.8			
						9.2	0.9			
						9.4	0.7			
						9.3	1			
						9.6	0.7			
						9.7	0.8			
				Average		9.741666667	0.85			
				Standard Deviation		0.458174904	0.131425748			
2353		-5.0	-3.1	8.8		8.4	0.6	X		
			356.9			8.4	0.7			
						9.1	0.7			
						8.5	0.8			
						8.1	0.8			
						6.5	0.7			
						5.5	0.5			
						6.2	0.6			
						4.4	0.5			
						4.8	0.5			
						5.5	0.7			
						6.3	0.8			
				Average		6.808333333	0.658333333			
				Standard Deviation		1.618898803	0.116450015			
2354	Mosting	-4.5	-8.6	22.3		10	1.6	X		
			351.4			9.9	1.4			
						9	1.1			
						11.7	2			
		Mare Nubium				8.2	1.3			
						9.1	1.4			

						8.3	1.1			
						9.4	1.3			
						8.3	1.2			
						9.1	1.3			
						10.4	1.8			
						10.7	1.6			
					Average	9.508333333	1.425			
					Standard Deviation	1.072345207	0.276750626			
2355		-32.3	-11.9	9.3		6.6	0.9	X		
			348.1			5.3	0.4			
						5.4	0.4			
						4.5	0.3			
						4.3	0.3			
		an extra data point				4.7	0.4			
		to fill a gap				6.9	0.5			
						6.8	0.5			
						6.6	0.5			
						6.2	0.9			
						6.5	0.8			
						5.6	0.7			
					Average	5.783333333	0.55			
					Standard Deviation	0.940824912	0.219503572			
END OF FILE										
Please Note:-										
Some craters appeared degraded and limbs too unclear to be used										
and were not as clean as the USGS maps indicated										